DOCUMENT RESUME

ED 046 319	HE 001 839
TITLE	Upward Bound 1965-1969: A History and Synthesis of Data on the Program in the Office of Economic Opportunity.
INSTITUTION	Office of Economic Opportunity, Washington, D.C. Office of Planning, Research, and Evaluation.
SPONS AGENCY	Office of Economic Opportunity, Washington, D.C.
PUB DATE	30 Mar 70
NOTE	334p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$13.16
DESCRIPTORS	Achievement, College Attendance, *Compensatory Education Programs, *Disadvantaged Youth, Evaluation, Financial Support, *Higher Education, School Holding Power, *Special Programs, *Student Characteristics
IDENTIFIERS	*Upward Bound

ABSTRACT

Chapter I discusses the purpose and rationale for a comprehensive study of the Upward Bound Program and presents the study design and methodology. Chapter II presents a summary of the findings on student characteristics and program achievement and on program administration and other areas, and the recommendations. Chapter III presents the history of the Upward Bound program in the Office of Economic Opportunity. A list of research studies and a synthesis of research findings are presented in Chapter IV. Chapter V discusses student characteristics and indicators of program success such as college enrollment and retention. Chapter VI presents an analysis and findings of field visits. A cost-benefit analysis of the Upward Bound program is provided in Chapter VII. Chapter VIII is a summary of basic Upward Bound issues and suggests needed research and evaluation. And Chapter IX discusses the Upward Bound student in college: the disadvantaged applicant and the application process, and overview of financial aid considerations and unmet needs. Abstracts of previous research, Upward Bound guidelines 1969-70, and a computation of lifetime income are presented in the appendices. (AF)

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UPWARD BOUND 1965-1969:
A History and Synthesis of Data on the Program in the Office of Economic Opportunity

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Evaluation Division
Office of Planning,
Research & Evaluation
Office of Economic
Opportunity
March 30, 1970

Addition to Information in Upward Bound 1965-69

A recent calculation of the number of students eligible for and in need of programs like Upward Bound suggests an estimate of 250,000 rather than the 600,000 figure provided earlier by OEO and used in the report. The recent calculations were performed by staff of the Evaluation Division, based in part on data in Upward Bound 1965-69.

UPWARD BOUND 1965-69:
A HISTORY AND SYNTHESIS
OF DATA ON THE PROGRAM
IN THE OFFICE OF ECONOMIC OPPORTUNITY

February 1970

Greenleigh Associates, Inc.
New York Chicago Washington San Francisco

Printed in the United States of America

The study reported herein was performed pursuant to contract No. B99-4910 with the Office of Economic Opportunity, Executive Office of the President, Washington, D.C. 20506. The opinions expressed herein are those of the author and should not be construed as representing the opinions or policy of any agency of the United States Government.

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February 24, 1970

Dr. Oliver Moles, Project Officer
Office of Planning, Research and Evaluation
Office of Economic Opportunity
1200 19th Street, N.W.
Washington, D.C. 20506

Dear Dr. Moles:

We are very pleased to submit this final report of Upward Bound 1965-69: A History and Synthesis of Data on the Program in the Office of Economic Opportunity.

The study was conducted under contract with the Office of Economic Opportunity and in cooperation with the Office of Education of the U.S. Department of Health, Education, and Welfare. It was begun in June 1969 and involved field work in 22 Upward Bound projects at host colleges in all the OEO regions.

The study focused on what has been learned from studies of the Upward Bound program during its almost five years as part of the Office of Economic Opportunity. It synthesized all previous research and analyzed the data from the Upward Bound data system to answer questions about the overall effectiveness of the program with respect to its goal: offering an escape from poverty for economically and academically disadvantaged youth via higher education.

In addition to the data acquired from previous research and the Upward Bound data system. comprehensive information about current operations was obtained from interviews conducted with project directors, instructors, guidance personnel, and the program participants during the field visits. In-depth interviews were also held with past national directors of the program and many other persons whose connection with the program, historically, was considered vital for our information base.

The study's findings highlight the substantial and incontrovertible achievements made by the program with respect to the enrollment and retention of Upward Bound graduates in college. They also point to the need to improve many programmatic and administrative areas, including funding, the academic year segment, community relations, high school and host institution relations, national and local program relations, and research.

We are grateful to all those who cooperated in this endeavor on all levels, particularly the OEO and OE agency staffs and the project directors and instructional personnel at the host colleges which we visited.

We are confident that this report will be extremely useful to all those concerned with the education of disadvantaged youth and especially to those in the Office of Education now responsible for the Upward Bound program since its transfer.

Sincerely yours,

Arthur Greenleigh

Arthur Greenleigh
President

ACKNOWLEDGEMENTS

We wish to express our gratitude to those who were involved in planning and conducting this study. While it is not possible to extend individual recognition to all who had a role in this study, we have tried to single out those who gave the most time and energy to the study effort. Even so, we have not been able to include everyone.

We wish to thank the project directors, their assistants, staff members, and students of the 22 Upward Bound projects we visited this past summer who graciously consented to be interviewed and to furnish data for the study. We are also grateful for the cooperation of the host institutions and the various members of the admissions and financial aid offices who cooperated with us.

Special recognition must be given to several Federal agency staff members who played main roles in the study. Dr. Oliver Moles, of the Office of Planning, Research and Development of OEO, who served as project manager for the study, was instrumental in gaining the cooperation of other agencies. Mr. Fred Bresnick, the acting director of Upward Bound for the Office of Education, cooperated fully in supplying us with essential data services and historical background for the study. Mr. Charles B. Cole of Applied Data Research, Inc., tirelessly furnished us with data from the Upward Bound data system and gave us insights into the complexities of the data.

Those whose roles were most significant in the planning, operation, or analysis of the study are listed as follows:

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Mary Ellen Goodman, Editor and Special Assistant who worked on the final report
Sheri Tierney, Research Associate, who had a major role in the preparation of the statistical analysis and interpretation of data
Mark Durrell, Research Assistant, who helped in the literature research and the analysis of the data
Mr. Harry Van Houten, Senior Consultant, who assisted with the design of the study instruments and the interpretations of the data

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Mr. James Moore, Director, Division of Student Financial Aid, USOE
Mr. Stanley Sallet, Special Assistant to the New Jersey State Commissioner of Education
Mr. Philip Wheeler, University of California at Berkeley

To all these we express our deepest appreciation.

Hazel S. McCalley, Ph.D.
Officer in Charge and
Senior Vice President

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I. INTRODUCTION

This report marks the culmination of a study of the Upward Bound program from its beginnings in the summer of 1965 as a pilot precollege program for academically and financially disadvantaged students sponsored by the Office of Economic Opportunity (OEO) until its transfer to the U.S. Office of Education on July 1, 1969. The report describes the inception and functioning of Upward Bound as a national emphasis program within the Community Action Program (CAP) of OEO, with the attendant problems involved in launching and maintaining it as a national effort; the characteristics of its participants; and the results of visits to a selected sample of 22 Upward Bound programs during the summer of 1969. It also includes a synthesis and analysis of all of the available research literature on the program and of the significant information drawn from the data bank maintained by the program.

This study was conducted by Greenleigh Associates under contract number 899-4910 for the OEO, and with the cooperation of the new Upward Bound Branch, Division of Student Special Services, Bureau of Higher Education, U.S. Office of Education.

A. Purpose and Rationale for a Comprehensive Study of Upward Bound

The purpose and need for this project were indicated in the proposal which led to the initiation of the study:

> ...to study what has been learned in past years from independent studies of the Upward Bound program; synthesize that information; evaluate the success in reaching national program objectives; identify the factors responsible for the successes; and make recommendations involving future program operations and evaluations.

The avowed general purpose of Upward Bound was to generate excitement for success in education among secondary school students who came from "disadvantaged" homes and who were poorly prepared academically. The program sought to inspire these youngsters with confidence in their natural abilities and, at the same time, to endow them with the skills necessary to make involvement in higher education both possible and successful.

To achieve its goals, the Upward Bound programs were designed with several important features: cooperation between secondary schools and the sponsoring institution of higher education; a curriculum which ranged over remedial education, skill development, aspects of creative thinking and effective expression; creation of positive attitudes toward self and learning; a varied program of cultural, recreational, and group activities to augment the academic program; and the provision of necessary health services to insure the physical and mental well-being of the participants.

In addition to helping poor and latently talented youngsters to achieve success in higher education programs, Upward Bound envisioned producing a reservoir of dedicated young people, effective, successful, and committed to helping similar students by blazing a trail for them.

With the coming legislative transfer of Upward Bound operations to the Office of Education on July 1, 1969, it became incumbent upon the Office of Economic Opportunity administration to take a final look at the Upward Bound programs and to deliver an objective, historical overview, and an analysis of those factors which made up the many facets of the program and which may have contributed stubstantially to whatever success the program has had.

The inequities of the national educational system with respect to the poor and the disadvantaged students have been well documented. A wide range of literature, from the narrative of Michael Harrington's The Other America to the data and controversy surrounding James S. Coleman's Equality of Educational Opportunity, presents a dismal picture of failure. The high percentage of high school dropouts and pushouts reflects the inability of the social system generally and the educational systems particularly to fire the imagination of this group of students.

Upward Bound was born as part of a salvage operation to rescue young people with good potential but poor academic backgrounds who, according to predictive instruments then in use nationally, would not do well in institutions of higher education and thus, so the circular logic went, ought not be encouraged to attempt admission to colleges and universities. Upward Bound was intended to enable these students to escape poverty through education, a route too often closed to them. The results of slightly more than four years of Upward Bound are an incredible success story. These white, black, brown, and Indian youths from the urban slums, depressed rural areas, isolated mountain hollows, and segregated reservations are not only admitted into institutions of higher education by the thousands, but they are staying and achieving. The rates of admission and retention are comparable to, and often better than, the rates of the nationwide population.

It must be emphasized that Upward Bound is a small program; no more than 27,000 students have been funded at any one time since its inception. Less than $31,000,000 Federal dollars per annum have been expended for program support at its peak effort of approximately 300 programs. Thus there are undoubtedly hundreds of thousands of students now relegated to educational oblivion who could benefit from this program; a figure of 600,000 has been suggested by OEO as being the universe of students probably eligible for Upward Bound. This report, looking to the time when political and economic factors might combine to provide realistic funding for these projected numbers, provides a comprehensive description and analysis of the Upward Bound program and its components as well as some answers to basic programmatic and administrative questions such as the following:

... How was this program developed?

... What were the elements which engendered its success?

... What were its basic strengths and weaknesses?

... What was learned from this program that suggests changes and restructuring of our educational institutions?

... How could the program be strengthened and improved?

B. Study Design and Methodology

The central purpose of the study is to provide an objective and impartial review of Upward Bound operations, existing data, and existing evaluation studies. To accomplish these purposes several independent and correlated approaches were taken.

1. Review and Analysis of Research on and Evaluations of Upward Bound

All available research reports and evaluations of the Upward Bound program have been studied and analyzed. Significant data and findings have been reported and the common findings of this literature with respect to programmatic successes and failures and recommendations for program improvement have been synthesized. This research of the literature and evaluations in abstract form is contained in Appendix A. The synthesis of research findings appears in Chapter IV.

2. Review of Existing Data

A great deal of both hard and soft data exists for the four-plus years that Upward Bound was under OEO administration. Included are memoranda to staff on all levels, in-house studies conducted by the Data Systems office of Educational Associates, Incorporated (the contract agency to OEO for Upward Bound during the period), progress reports by EAI to OEO, reports on national conferences, site-visit reports by field consultants, various articles, speeches, individual Upward Bound program reports, and the Upward Bound data bank, a continuous updating system on student and program characteristics which also provides some tracking of a number of former Upward Bound students.

The accumulated data have been studied with a focus on the historical development of the program particularly with respect to program problems and program achievements. In the case of the hundreds of site-visit reports from the programs, samples of these data were used.

The information contained in the data bank was utilized to answer a large number of carefully selected queries focused to determine the relationships between student and program characteristics, and changes in these relationships during the period studied, to determine indices of success in meeting the major objectives of the Upward Bound program. A detailed presentation of the data and their analyses are documented in the chapter on student and program characteristics, Chapter V.

3. Field Visits to a Sample of 22 Upward Bound Programs

To augment the accumulated data and provide a current view of student and program characteristics, a sample of 22 of the Upward Bound programs was visited during the summer of 1969. The sample was selected on the basis of college size, regional location, urban-rural character, ethnicity, quality of program, whether typical, innovative, or troubled, and the frequency of program visitation during the past year. The selection was made by the OEO project manager in consultation with Upward Bound staff from the OEO national office, and the Greenleigh Associates project staff.

Each of the 22 programs was visited and observed for five days by trained field analysts. Considerable data were generated from overview reports and interviews conducted with past and present project directors, university and secondary school instructors, guidance personnel, tutor-counselors, students, and the admissions staff of the host institution. Special interview schedules and interview guides were developed for this purpose and the resulting data were coded, tabulated, and analyzed.

This sample was then compared with the current universe of 301 Upward Bound programs to validate its representativeness. Strong similarities were found for all major variables, and thus we have used the findings from the sample to express specific, selected findings which we believe are representative of the Upward Bound program. A description of the field visits and an analysis of that data is incorporated in Chapter VI of this study.

4. Interviews With Persons Who Played Significant Roles in the Historical Development of Upward Bound

The genesis and development of the Upward Bound program occupies a unique position in the history of the antipoverty program. The persons who were involved in the early stages, and who administered, decided policy, monitored, and directed the program, were considered vital in furnishing us with a global understanding of the program. From a long list of such persons, interviews were conducted with all of those who had had significant impact on the development and implementation of the national program between 1965 and 1969.

In-depth interviews, from three to six hours in length, were conducted with each of these persons. The interviews were based on comprehensive interview guides created for each area of program history. The results of these interviews, combined with corroborative data from other sources, form Chapter III which describes the underpinnings, history, and change involved in the Upward Bound program.

5. Benefit-Cost Analysis

After a careful review of existing benefit-cost literature on Upward Bound, and an analysis of the availability of desirable data for an updated benefit-cost study, a study design was created based upon the use of a large sample of Upward Bound students, each of whom had an older sibling of the same sex. The siblings were utilized as a control group for purposes of comparison in terms of educational levels attained and estimated economic consequences of such educational levels, over a period of time.

The data developed in this study were used in conjunction with the latest available economic and statistical evidence and program cost information to provide a comprehensive analysis. This is included in Chapter VII.

6. Presentation of Study Results

In each chapter, following presentation and analysis of data in text and tables, we have presented our findings and recommendations. A summary of these findings and recommendations is contained in Chapter II.

The basic analytical tools used in handling data for this study were: item analysis and cross tabulation of variables. It was the judgment of the consultants that the data would not yield more significant findings if subjected to a multivariate analysis, especially with respect to such dependent variables

as college admission and college retention. There are too many individual variables relative to motivation, intelligence, psychic, and life-style factors which were unaccounted for and which defy this type of analysis. Where soft data are used in narrative sections as the bases for certain assumptions, the sources of such data are specifically indicated.

II. SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following is a summary of findings and recommendations based on data obtained from observations, interviews, previous research reports, and the analysis of information from field instruments and from cumulative data in the Upward Bound data system.

A. Findings on Student Characteristics and Program Achievement

1. Recruitment

a. Students recruited for Upward Bound programs were generally representative of the academically underachieving and economically disadvantaged youth in this country, especially those of minority groups. Between 52 and 54 percent of the students from 1966 to 1969 were black; for the same period the proportion of white (non-Spanish speaking) students decreased from 33 to 28 percent and an increasing proportion of program participants were from Spanish-speaking and Indian minority groups.

b. A slightly greater proportion of female students were enrolled for the same period, representing between 50 to 52 percent of the total. Despite efforts to recruit more black males, there were slightly more black females enrolled.

c. The Grade Point Average of students at the time of recruitment into Upward Bound ranged from 2.27 (C+) in 1967 to 2.92 (B-) in 1969, showing a small but significant increase, probably attributable to a change in recruitment patterns designed to select those who had more obvious potential to graduate from college.

d. On the average, more than 10 percent of the students enrolled in Upward Bound in the years 1966 to 1969 have changed their curriculum from a nonacademic type (general, commercial, vocational, or remedial) to a college preparatory one. This is a significant change attributable to the intervention of the Upward Bound program in assisting participants to prepare themselves for college.

e. From 1966 to 1969 approximately 85 to 87 percent of the students recruited into Upward Bound met the poverty criteria guidelines established for admission into the program. For the same period, although 6 to 12 1/2 percent of the Upward Bound students apparently came from families with incomes above the criteria, it was difficult to establish authenticity for these data. In addition, the poverty criteria, especially for large urban areas, are unrealistically low; for students above these criteria, the data show that the amounts are not of great substance.

f. Data indicate that, for the period of 1966-1967, approximately 70 percent of Upward Bound students came from urban areas and 30 percent from rural ones.

g. It has been extremely difficult to balance programs ethnically in some areas of the country. For example, in the South and in some eastern urban areas it has been a problem to recruit white students.

h. It has been estimated that there are approximately 600,000 disadvantaged students who could probably benefit from the Upward Bound type of precollege program. At present only a small fraction of this universe, approximately 4 percent, is being served by Upward Bound.

2. Retention in High School and Upward Bound

a. Upward Bound, in addition to serving as a channel to college for disadvantaged students, also acts as a deterrent to dropping out of high school. One study showed that Upward Bound students have approximately a 5 percent high school dropout rate compared with a 35 percent dropout rate for the general low-income student population.

b. Retention in Upward Bound is a significant problem. Data indicate that at least one-third of the students enrolled in Upward Bound do not attend the final Bridge summer. Attrition at this critical point, often because the student needs to earn money for college, may well militate against success in college. The number of nonbridge students who "separate" from Upward Bound also seems high. The data and reports suggest that a substantial number of nonbridge students are being dismissed by project directors out of concern that their poor progress and lack of motivation would reflect poorly on the success of Upward Bound.

3. Attitude Changes During Upward Bound

According to longitudinal studies undertaken by Hunt and Hardt with respect to students' attitudes on several important change measures, it was found there were significant score increases in such areas as motivation for college, interpersonal flexibility, self-esteem, internal control, and future orientation. Although these scores were not measured against control groups, they were compared with large samples of high school students which produced the normative data for the change measures. These significant attitude changes were also corroborated in interviews with Upward Bound staff members who have been in close contact with the students over a period of years.

4. College Enrollment

a. A large majority of Upward Bound students who graduate from high school and attend the Bridge summer, enroll in college. The enrollment rate has been approximately 70 percent for the years 1967 to 1969. This rate has been consistently higher than the national percentage of 50 percent of all high school graduates who go on to postsecondary education.

b. Data based on a large sample, 4,000 seniors, in Upward Bound during 1969, show that 85 percent of these made application to college. Seventy percent of these seniors were subsequently enrolled in college.

c. It has been found that larger numbers of Upward Bound students have been consistently enrolled in nonhost institutions rather than in host institutions during the years 1966 to 1969. In 1969, about 60 percent of the students were enrolled in institutions other than those they attended for Upward Bound. The overwhelming majority are in four-year public and private colleges.

d. It is a fact that the majority of Upward Bound students are not enrolled in Ivy League or "prestige" colleges. The largest number of them go to nonhost colleges and universities across the nation. They are usually enrolled in four-year public institutions with a majority of white students. From 1967 to 1969 the proportion of Upward Bound students who are black, and the proportion of black Upward Bound students going to college, has remained almost constant at around 56 percent. However, the proportion of black Upward Bound students attending predominately black colleges has declined from 64 percent to 29 percent.

e. From 1967 to 1969 approximately 20 percent of the average number of Upward Bound graduates enrolled in college reported that admissions requirements had been modified in some way to permit them to enroll. Conversely, approximately 80 percent were admitted through regular admissions processes or through "open door" admissions policies.

f. The college in which an Upward Bound graduate enrolls is often determined by the financial aid package he is offered or it may be the only college offering him financial assistance. This often precludes his making a decision based on the suitability of the school in relation to his talents or his choice of studies.

g. Although some of schools accepting Upward Bound students often do modify some admissions regulations, not enough of them offer any intensive supportive academic services and counseling.

h. It is unfortunate that a relatively large number of host institutions have shown such small commitment by enrolling only a few students from the Upward Bound programs which they sponsor.

5. College Retention

a. According to available data from the years 1966 to 1969, Upward Bound students in college have retention rates equal to those of the national college-going population, and it is projected that their graduation rates, about 50 percent of those who originally enroll in college, will also equal or better the national graduation rates of about 50 percent.

b. By comparison with their older siblings of the same sex, Upward Bound students have significantly higher retention rates in high school and college, according to data developed by Hunt and Hardt of the Syracuse University Youth Development Center. Upward Bound thus acts as a dropout prevention program as well as a precollege program.

c. The basic reason Upward Bound students leave college is academic failure. Poor educational background and preparation make it difficult for Upward Bound students to meet academic requirements without additional counseling and assistance. Other reasons for nonretention relate to financial, personal, and social problems.

6. Benefit-Cost Assessment

The benefit-cost analysis of the Upward Bound program indicated that, for the individual, using a 10 percent discount rate, the average benefit-cost ratio for the Upward Bound participant was 3:10. For the government, at a 5 percent discount rate, the average ratio was 1:16. Although the benefits of the program to the individuals are extremely good, economically the program could be considered only marginally successful for the government. But it is unfair to examine benefits and costs in terms of one program without considering other alternatives. It is possible that Upward Bound, in terms of its goals, when compared with other programs supposed to provide an escape route from poverty, may show relatively higher benefit-cost ratios than they do. In addition, very important benefits not readily measured by a benefit-cost study, in terms of dollars, may be those such as the opportunity for the Upward Bound graduate and his children to live a life out of poverty.

7. Impact on Institutions

a. Some significant changes have been noted in many of the host institutions which may be attributed to their association with the Upward Bound program. There is a larger measure of acceptance of the disadvantaged type of student, which includes waiver of admissions standards in some colleges, the formulation of special academic assistance programs, and the introduction of summer prep programs and special, first-year adjustment programs. Host institutions which have had experience with enrolling Upward Bound graduates have, by and large, increased their admission of Upward Bound students over the years.

b. There has been no perceptible change produced in the high schools by their association with the Upward Bound program, although some evidence in reports indicates that individual faculty members have been influenced in their teaching methodology, and some schools have been made more aware of the educational and counseling needs of their minority groups through the presence of Upward Bound Clubs.

B. Findings on Program Administration and other Areas

1. Financial Aid to Upward Bound College Students

a. Through the intervention and influence of the individual project director, currently most Upward Bound students entering college receive financial aid packages which are adequate to meet their basic needs. Some aid packages are barely adequate, and some students who are unable to obtain any financial assistance do not go to college. Project directors evidenced concern about the continued availability of such funds in the face of recent cutbacks in some Federal student financial aid programs.

b. Financial aid packages may include loans which some Upward Bound students and their families are reluctant to undertake because of future encumbrances. Other aid packages commit students to work a certain number of hours per semester. The disadvantage of a work-study grant for an Upward Bound student is that he often needs all his available time for study and can ill afford to spend hours on a job.

2. National Level Administration

a. Staff on the national level appears to be insufficient to process and handle administrative details and problems related to the functioning of the projects.

b. Communications to local projects with respect to policy, procedures, and information about the Upward Bound project nationally are inadequate. Project directors consider this a primary shortcoming.

c. Public relations, primarily in the area of publicizing the Upward Bound program, goals, and accomplishments to the Congress, the academic community, and the general public, have been insufficient. Very few persons outside of the projects know of Upward Bound's existence. This lack of knowledge about the national program and also about research findings extends to project directors, themselves, who expressed great concern about the information gap.

d. Services to local projects, such as assistance with budgeting and policy matters and advice on problems and on relationships with host institutions and community organizations, are often subject to delay in execution and resolution. Project directors have indicated the need for more effective and expeditious servicing. Project directors felt that the previous contract agency ought to have been able to provide better services.

3. Local Level Administration

a. The Upward Bound Guidelines have not been specific and clear with respect to participant selection. Several changes have occurred over the years emphasizing or deemphasizing such criteria as "high risk," "college," or "education beyond secondary school." Project directors have indicated that they have been at a loss to know how to interpret the selection criteria.

b. Because it offers the simplest source, there has been an overreliance on the high schools to recruit participants. However, high schools often want to send their best students because they feel that a poor showing reflects poorly on the school. This plays havoc with the selection criteria. Too few students are being recruited by community organizations. Community Action Agencies (CAAs), Public Advisory Committees (PACs), and service organizations.

c. The Guidelines suggest that a desirable staffing pattern for projects would include one-third secondary school and one-third university personnel but some projects report difficulty in recruiting university personnel because of inadequate budgets or late funding.

d. The annual turnover rate of project directors has exceeded 30 percent. New project directors who replaced them are often not prepared at first to assume the administrative and executive roles they must fill. This is also true to a lesser extent of their assistants and of other staff. The absence of provision for adequate training for these positions is a disservice to the programs.

e. Many tutor-counselors viewed the definition of their job and the services they were expected to render as vague and ill defined.

f. Relations with host institutions, high schools, and boards of education have been weak and ineffectual.

g. Parental involvement in all aspects of Upward Bound projects is negligible and in need of vast improvement.

h. Involvement of Upward Bound programs with community action agencies, service organizations, minority organizations, and local government was most inadequate, as were relations with other poverty programs such as the Jobs Corps or VISTA.

4. Curriculum

a. The curriculum in Upward Bound projects is as diversified as the many projects themselves. Some concentrate completely on discussions and are student centered; others are highly structured in their subject matter and emphasize remedial types of programs. Some offer large amounts of free time to the students while others offer almost none. It is the consensus of large numbers of Upward Bound students and Upward Bound graduates that a balance is needed between time programmed for subject matter, time devoted to upgrading reading and writing skills, and to providing study skill know-how which will enable them to cope with the academic realities of college-going.

b. The counseling and guidance components of Upward Bound need sharper delineation of the responsibilities to be assumed by each type of personnel. Accredited counselors indicated that more counseling at a professional level is needed and they suggest that other staff members who assume counseling and guidance roles need more adequate preparation. Counseling by indigenious nonprofessionals, which has been found to be useful in a few Upward Bound programs, was almost totally absent.

c. The follow-up or academic-year component is in need of special study to improve its overall structure and the quantity and quality of its effort. According to most national staff, project directors, and students, it is not functioning adequately enough to maintain the motivational and academic gains made by Upward Bound students during the summer program.

5. Advisory Organizations

a. The National Advisory Council and the National High School Principals Advisory Council, in the view of the National Directors, have rendered exemplary services to the national administration of Upward Bound and have been instrumental in creating valuable changes over the years; however, project directors were not informed of what, if anything, such groups had done.

b. Both the Public Advisory Council and the Academic Policy Group have generally functioned with mixed effectiveness as groups. Project directors, although not decrying their utility, have tended to rely more on concerned and influential individual members of these groups than on the groups themselves.

c. The newest advisory group, the Project Directors Steering Committee, has been instrumental in giving project directors representation in national program policy and decision making as evidenced at the national meetings held in New Orleans, Dallas, and Denver.

6. Funding

a. The 1968 increase from 10 percent to 20 percent in the local contribution required did not, as some feared, lead to a reduction in either the number of new proposals from colleges seeking to operate Upward Bound programs or from present projects seeking refunding. However, this doubling of the local share of the budget has made it difficult for some colleges to sustain their commitment to Upward Bound.

b. As a result of a 7 to 13 percent budget cut in 1969, Upward Bound is currently operating below 1968 levels. This cutback, as well as the national policy of allocating almost all new Upward Bound monies to new programs and holding all old projects to their original levels, has hurt Upward Bound. Project directors said that almost every aspect of the program including staff, summer program intensity, and the character of the follow-up has been affected by the fiscal condition and policies of the national program.

c. Project directors, as well as a good portion of the OE-UB staff, found the new restrictions on budgets (in the area of stipends, for example) unduly restrictive and unreasonable.

d. Many projects spend more than the estimated two-thirds of their grant monies in the summer. Thus fiscal resources are most strained in attempting to provide continuing academic content in the follow-up program.

7. Research

a. Although a body of research has grown around Upward Bound, a number of program areas are in need of vital longitudinal research to guide program orientation and change. These areas are discussed in Chapter VIII.

b. The present Upward Bound data system was considered valuable in generating data on student and project characteristics for broad national program considerations. This was the task for which it was designed. It does reveal shortcomings when attempts are made to utilize it for complex research involving longitudinal areas of change. A more detailed discussion of this area is also contained in Chapter VIII.

C. Recommendations

1. Program Expansion

Upward Bound should be increased to 75,000 enrollees in 1,000 projects within the next five years. This increase of about 700 projects should be staged so that about 140 new projects, each with approximately 75 students, are added annually. Assuming a per-student Federal dollar cost of $1,350 per year, this would mean an increase of 14 million Federal dollars for each of the five years, and a total budget of 101 million dollars in the fifth year.

2. Recruitment

a. Upward Bound should remain a program for low-income students and should focus on the underachiever. In order to make this clear to Upward Bound staff and recruiters, this target population should be defined in an expanded statement in the Upward Bound Guidelines. The public should also be aware of this focus so that Upward Bound is not misunderstood or compared inaccurately with other Federal programs.

b. Although project directors and other national staff have indicated that poverty income criteria are unrealistically low, especially in large urban centers and in specific areas, no changes in these criteria should be instituted until a study is made to determine whether the current criteria are hampering recruitment efforts.

c. The effort, unsuccessful so far, to recruit more black males than females into Upward Bound should be redoubled. Care must be taken that these efforts do not result in any further diminution of the steadily shrinking Caucasian enrollment in Upward Bound.

d. Upward Bound should continue to be flexible in attempting to maintain racial balance in its programs. While some urban programs may be able to meet the criteria stated in the Guidelines, it is clear that a significant number of Upward Bound grantees cannot and should not be expected to meet these criteria.

3. Financial Aid and Freshman Support

a. Each Upward Bound project should allocate some portion of its budget for personnel to counsel project graduates who have entered postsecondary educational institutions. This is critical to the success of these students because they can be expected to have greater academic difficulties than many of their non-Upward Bound fellow students; they need the kind of continuing support they received in Upward Bound, and the colleges will not, in the near future, have funds to provide this service. For instance, if 10 percent fewer new entrants were budgeted into a project and the money thus saved were used to provide supportive services for project graduates in college, the money would have been well spent if it resulted in a 10 percent increase in college retention.

b. Upward Bound host colleges should be prepared to provide supportive services for all Upward Bound graduates in that college. Federally supported student financial aid should be substantially increased. In the next academic year Upward Bound will feel the effects of the large cutbacks in Educational Opportunity Grants (EOG) funds for new applicants, which could result in preventing able students from going to college after they have been prepared for this step in Upward Bound. This is one of several areas where immediate cooperation on the part of local and national Upward Bound and Talent Search staffs can and should take place. They should urge Congress and the Office of Education (OE) to increase the appropriations for EOG and for other financial aid programs.

4. National Program Operations

a. The national staff of Upward Bound should be increased immediately. Not only should existing vacancies be filled, but new staff should be added so that there can be effective regular communication with local projects. One staff member is needed for every 20 programs. To expect "fellows" or "trainees" to maintain effective and informed liaison with the projects is unwise. Although Upward Bound programs are divided into six regional areas at OE, staff should not be allocated by area but by the number of programs. The northeast area, for example, should be more heavily staffed than the Great Plains area.

b. National staff members should receive on-the-job training before assuming full responsibility for the programs in an area. The practice of recruiting current or former project directors for national staff should be encouraged.

c. The annual national meeting of all project directors should continue to be held, preferably in the fall when decisions about proposal development and funding levels should be disseminated.

d. The national office should provide project directors with more information of all types, including quarterly reports from the National Director, the Data Systems Office, and the Division Director. While a magazine such as Idea Exchange is useful, it should provide more current administrative information and should be a forum for curricular debates. New systems of feedback should include mechanisms whereby project directors--their staffs, students,and host institutions--receive results from all evaluations, especially site visits.

e. The role of the consultant site-visitor needs better definition and larger focus. The site-visit reports are useful but are rarely communicated to the project directors whom they could help most. It is recommended that the consultant have a strong advisory role, which should consist of program observation, discussion of problems with the project director and the national office,planning with the project director for the resolution of these problems,and the provision of technical assistance for that end. The joint planning between directors and consultants could become the basis for a continuum of visits to assist the programs in overcoming their difficulties.

f. To improve the overall quality of the consultant staff, it is felt that the selection of currently operating project directors for this role should be avoided because their evaluative judgement may be distinctly biased by their own program experiences. Consultants should be chosen who have wide experience in working with academically disadvantaged and/or minority youths, and have significant relations with colleges hosting Upward Bound programs. The training of consultants, in view of the previous recommendation, should take place periodically and involve both national staff and project directors in cooperative sessions to define roles, responsibilities,and working relationships.

g. The relationship between the Upward Bound and Talent Search programs which, though different in focus, are complementary, should be one of increased cooperation particularly since both are now part of the OE Division of Special Services to Disadvantaged Students. The programs should exchange information and should serve as recruiting and service aides for each other.

h. Upward Bound, along with the other Federal programs for disadvantaged students, should seek the active support of the community which should know more about the program, lobby for its support, and publicly endorse its aims and accomplishments. This community includes such recognized professional organizations as the high school and college teachers, guidance, and education associations.

5. Local Program Operations

a. Project directors should be simultaneously aware of the needs of the poverty community, the academic community, and the students. The ideal project director should be an educator whose racial and ethnic background and life experiences should reflect that of the majority of the students in his project.

b. The national office should offer an annual or semiannual training course for new project directors, who now represent one-third of the total number of directors each year. Training sessions, which should be held before the start of the summer session and again in the fall, if possible, should take several days to cover national and local policy, program, and administration. Training personnel should include members of the national and the Upward Bound data systems staff, current project directors, and consultants. Host institutions which are new grantees of Upward Bound funds, and those which are having administrative or fiscal difficulties, should send a business or administrative officer to the training session in addition to the project director.

c. In order to have greater impact on communities and high schools, efforts should be made, wherever possible, to increase the number of students recruited from a single high school. More meaningful ways should also be found to involve the high schools themselves, not only by hiring high school staff and forming Upward Bound high school clubs but by establishing better communication with high school administrators and by adding them to staff and advisory positions in Upward Bound programs.

d. As Upward Bound students become college upperclassmen, they should be used in a wide number of academic and extracurricular roles on Upward Bound staffs. This would provide them with both income and leadership opportunities and would provide Upward Bound with committed personnel.

6. Curriculum

a. Upward Bound, should have a strong curriculum which must, at a minimum, teach the student to read and write with enough skill to meet the requirements of college. Remedial subject matter and study skill curricula should be innovative.

b. Program flexibility is and should remain a central characteristic of Upward Bound. The Guidelines should continue to avoid being prescriptive in tone so that program planning can continue to take regional differences into account. To expect programs in the Southeast to maintain the identical standards as the Midwest, for example, is unrealistic.

On the other hand, regional differences should not be used to justify interpretations of Upward Bound policy that may be at wide variance with the intent of the Guidelines.

c. Continuing emphasis should be placed on the follow-up portion of Upward Bound programs to make them more effective. Successful follow-ups, especially in the logistically difficult rural programs, should be described in detail in a publication which is updated annually and distributed to all projects. The problems of many follow-up programs may stem from overstaffing and overspending during the summer program; perhaps an attempt should be made to use a smaller number of effective full-time teachers in the summer and thus make more funds available for more part-time follow-up staff.

7. Community Relations

a. Upward Bound should continue its relationship with Community Action Agencies and should continue to involve poor people in as many phases of the Upward Bound program as possible. This means that representatives of the poverty community, not only families of Upward Bound students, should have, at a minimum, a meaningful advisory role in the Upward Bound program.

b. The interrelationship of Upward Bound and its host institutions with the community from which the students come must continually be encouraged. The recommendations of the Dallas and New Orleans Conferences in the area of increasing community involvement in Upward Bound should receive substantial attention, as well as monitoring, by the Upward Bound national office.

8. Advisory Organizations

a. The chairman of the Upward Bound Project Directors Steering Committee should, as part of the Upward Bound grant to his institution, be provided with additional funds for travel, communications, and secretarial assistance. In addition, he should have a full-time assistant director who can devote all his or her time to the local Upward Bound program, leaving a substantial portion of the project director's time free for Steering Committee activities. The Steering Committee Chairman should be elected by secret ballot for a term of one program year from among nominees who may be suggested by any project director.

b. All future meetings of the National Advisory Council, the National High School Principals Advisory Council, and the Project Directors Steering Committee should be scheduled to allow all three committees to meet jointly at least twice yearly to pool their information and influence.

9. Funding

a. When any additional Federal funds become available to Upward Bound, the first priority should be to return projects to the funding levels of 1968 and, in addition, to provide for a general increase in budgets of between 5 and 8 percent of the Federal 1968 dollar level. The total increase needed will total between 10 and 15 percent per project, depending upon how much each was cut back in the 1969 budget reductions. Under the present law, this increase in funding will, of course, have to stay below the unrealistic $1,440 Federal dollar level per student cost. This figure should be increased, or should at least allow for exceptions. Current programs cannot continue to operate effectively without sufficient funds.

b. These recommended additions and restorations of funds, when available, should not be automatic but should be contingent both upon the extremity of the need and, more importantly, the overall commitment of the host college and the Upward Bound program. This commitment should be judged not only by the number of Upward Bound students admitted to the host college but on its overall cooperation and willingness to participate in Upward Bound. There are institutions for whom budget increases would result in more inadequate programs and this, of course, is not recommended.

c. Automatic refunding of programs should not be continued. Vigorous new programs should be funded in place of programs which are qualitatively weak. Students should be relocated from any programs not refunded.

10. Research and Demonstration

a. The primary task of the present data system is to provide information for management needs. As such, the first priority ought to be the refinement and updating of the system to fulfill these needs by expanding its mandate for data inputs. This should be done in the areas of characteristics of host institutions, Upward Bound staffs, funding information, and program data in addition to that which now exists. A second priority relates to the use of the system for research. It is recommended that the research capacity of the system be increased to permit maximum use of modern research techniques. The utilization of random sampling and control groups should be instituted, and the existing capacity of the system to absorb longitudinal information on enrollees should be better utilized. Consideration should be given to the utility of providing the capability for the use of intersecting bases covering selective sampling for such intensive and longitudinal studies.

b. The Office of Education should seek additional legislation to allow Upward Bound to continue to engage in research and demonstration efforts, such as programs hosted not by colleges but by communities, civic organizations, or tribes in cooperation with a local institution of higher education.

c. The demonstration programs which recruit American-Indian students earlier in their high school years because of their early dropout rate should be continued.

d. Since research on Upward Bound by project directors has been prohibited, there is almost no literature on the program in educational or social welfare publications. While it is not generally desirable that Upward Bound funds be used for local research on Upward Bound students, some exceptions to this absolute limitation on local research ought to be authorized each year by the Upward Bound Branch Chief.

e. Any future evaluation of Upward Bound should include a discussion of ways to ascertain the social benefits which accrue to program participants. Such analyses should be an integral part of any cost-benefit studies.

III. HISTORY OF UPWARD BOUND

A. Economic Opportunity Act

The beginnings of Upward Bound lie in the Economic Opportunity Act of 1964, and this chapter traces the history of its growth, the highlights of its accomplishments, and its strengths and weaknesses from its inception in the Office of Economic Opportunity (OEO) in 1965 until its final transfer to the Office of Education (OE) on July 1, 1969.

In its turn, the Economic Opportunity Act grew out of the work of the President's Committee on Juvenile Delinquency and Youth Crime which had eventually become the OEO Task Force, chaired by Sargent Shriver, and established to create such legislation. Members of this Task Force included Stanley Salett, Richard Boone, and Richard Goodwin, all of whom played important roles in initiating the Upward Bound program.

Early in 1964, Francis Keppel, who was Commissioner of Education invited Carl Marburger, then Assistant Superintendent of Schools in Detroit, to chair an OE Task Force charged with determining how educational components could become part of community action programs (CAP) and what educational programs per se OEO might undertake.

In August 1964 the EOA, which established OEO, was signed by President Johnson. It contained a formula dictating that 80 percent of the CAP funds were to be allocated among the states while the remaining 20 percent could be distributed by OEO Director Sargent Shriver within the general mandate of the Act.

Mr. Shriver, eager to make OEO quickly visible throughout the country, established "national emphasis" programs, first Head Start, and then Upward Bound. As a national emphasis program, Upward Bound, although a part of CAP, was not administered locally but directly from Washington, and its budget came not from direct Congressional appropriation but from the 20 percent of CAP funds available to the OEO Director.

B. Early Program Proposals

At the same time that the Federal government was moving toward the establishment of Upward Bound, several large foundations, including the Rockefeller and the Carnegie Foundations, had been receiving proposals from a number of colleges asking them to support summer programs which, though uncoordinated, had one goal in common: to develop a college-sponsored program which would give disadvantaged high school students the capability to attend college.

One of the motivating factors in the initiation of these programs during the summers of 1964 and 1965 was undoubtedly the relationship between college students and faculty and the civil rights movement which had drawn many university people to the South in the summers of the early 1960s. Students and faculty, mostly white, returned to their educational institutions, mostly in the North, newly aware of the lack of poor and minority representation on the college campus. They urged their institutions to examine themselves to determine how they could offer their expertise to these underpriviledged groups.

Many of the proposals for action by students, faculty, or administrators suggested programs patterned after the summer institutes sponsored on college campuses for high school upperclassmen by agencies such as the National Science Foundation. The programs either bore names that were part of the history of the time such as Project Overcome or the College Candidate Program, or else bore a series of initials that bespoke purpose such as HEP, SOS, or ABC. In general, they all aimed to provide special college-like classes and to introduce these special students to the environment of higher education.

Under the new OEO, a research and demonstration office was set up to disburse OEO monies for experimental programs. Head of this office was Sanford Kravitz who had come from President's Committee on Juvenile Delinquency, and working for Kravitz on educational matters was Stanley Salett.

C. Upward Bound Pilot Projects

Among the proposals that started to flow into the OEO R&D office, was one from Dr. Thomas A. Billings, who was to become the second National Director of Upward Bound. His proposal, from Western Washington State College,and the proposals from 16 other campuses,became the Upward Bound pilot programs which operated in the summer of 1965.

The Upward Bound pilot programs funded for summer 1965 were:

* 1. Dillard University, New Orleans, Louisiana
* 2. Fisk University, Nashville, Tennessee
* 3. Howard University, Washington, District of Columbia
* 4. Texas Southern University, Houston, Texas
* 5. Webster College, St. Louis, Missouri
* 6. Morehouse College, Atlanta, Georgia

7. College of the Ozarks, Clarksville, Arkansas
8. Florida A&M University, Tallahassee, Florida
9. New Mexico Highlands, Las Vegas, New Mexico
10. New York University, Washington Square, New York City, New York
11. University of Oregon, Eugene, Oregon
12. Western Washington State College, Bellingham, Washington
13. Tennessee A&I, Nashville, Tennessee
14. Ripon College, Ripon, Wisconsin
15. Columbia University, New York City, New York
16. LeMoyne College, Syracuse, New York
17. Independent Schools Talent Search Program, Boston, Massachusetts

Among the unique features of these pilot programs was that six of them (those which are starred) were funded as a package developed by Educational Services, Incorporated (ESI) of Watertown, Massachusetts. ESI specialists developed a new curriculum for the six programs with which it worked. All six schools, except Webster College, were predominantly black institutions. Employed as a consultant to ESI, to write English curricula, was Dr. Robert Christin, Director of Freshman English at Notre Dame, who, in September 1965, was to become director of the contract agency for Upward Bound.

The reason for OEO to fund precollege programs was outlined in a memo from Richard Boone of CAP to Sargent Shriver on June 9, 1965, which notes:

> Secretary of Labor Willard Wirtz, and others, have repeatedly pointed out that the boy or girl who has the potential to do college work, but who never gets the chance is a resource that this country can ill afford to waste...
>
> An intensive talent recovery program in their last four years in high school could provide the key to a college education for thousands of them--and the opportunity to permanently break out of the cycle of poverty.

The pilot programs enrolled 2,061 students the first summer, and an additional 1,200 students were involved in limited follow-up programs in the academic year 1965-1966. Of the summer students, about 1,500 had just graduated from high school that June. Naturally those programs which took only high school graduates did not have what was later to be a distinguishing feature of the program, a full year of activity with the September-to-June portion of the program theoretically, at least, equal in importance to the summer component.

Stanley Salett listed the following conclusions drawn from the 1965 summer programs as critical in the development of the Upward Bound program:

...Students who have completed 12th grade and participate for only one precollege summer do not have enough time for the program to effect an intervention.

...Students who had only completed 9th grade would have four summers to participate, which is unnecessarily long. Underachieving potential dropouts usually do not become a major educational problem until at least 10th grade.[1]

...Several high schools and prep schools were interested in operating Upward Bound programs. This was permitted with prep schools such as those operating in the Independent Schools Talent Search Program (ISTSP). This was clearly understood to be an exception since Upward Bound was essentially to be a precollege program where the goal was to get a student from his high school to a college, not out of his high school into another kind of high school and then into college.

...The benefits of drawing students from a geographical area which would permit them to come to the college periodically during the school year were such that grantees were requested to limit themselves to a recruiting area that would make such follow-up logistically feasible. Grantees were also requested to adopt the "cluster concept," that is, to enroll sizeable numbers of students from a relatively small number of schools, rather than vice versa, in order that there might be some "ripple effect" whereby a large enough group of Upward Bound participants might have an influence on their peers and on their high school.

...It was felt that staff for Upward Bound should represent a mix from both colleges and high schools. Since Upward Bound did want to influence the high schools from which the students came, it was hoped that a staffing connection between high schools and colleges would lead to other kinds of productive arrangements.

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[1] Grantees working with groups such as the American Indians, where the dropout problem does become very serious at earlier years, were permitted, and in fact encouraged, by the Upward Bound national office to work with younger students.

While the desired influence may not have been achieved, Upward Bound Guidelines do state that "The teaching staff must include both college and secondary school faculty." Also included on the staff were tutor-counselors, usually undergraduates from the host institution, who served diverse roles in dormitories, classrooms, and the extracurricular phases of the program.

...The average pilot project had 120 enrollees and several had more than 200 which made for difficulties with individualization of attention and continuation of uniqueness of curricular efforts. As a result, it was felt that programs should be no bigger than about 150 students, a figure that has been purposely and steadily scaled down, so that average program size for 1969-1970 was close to 75 students for about 300 programs.

...It would be preferable not to write any Guidelines which prescribed the curriculum to be used. The 1965 pilot programs, according to Salett, found "an incredible wealth of interest and experimentation in trying out new things." The Upward Bound Guidelines, to this day, contain little on the subject of curriculum other than suggestions to maintain diversity, innovativeness, and richness in the curriculum.[2/]

D. Dr. Richard T. Frost, First National Director of Upward Bound

The success of the pilot programs in getting students into college raised questions about the type of students Upward Bound should recruit. Of the eligible students, 80.5 percent were admitted to colleges in the fall of 1965 after just one summer of Upward Bound. That impressive statistic called for an examination of the abilities of the participants in those first programs to determine whether they had, perhaps, been basically academically able youngsters for whom the summer of 1965 was merely additional academic insurance, or whether Upward Bound had been a lifeline without which they would not have gone on to college. The resolution of these questions and the establishment of recruiting policy was the primary task of Dr. Richard T. Frost, the first National Director of Upward Bound, who was appointed by Sargent Shriver in September 1965. Mr. James Simmons, who had been affiliated with the A Better Chance (ABC) program at Dartmouth College, was briefly affiliated with Upward Bound as his Deputy Director.

[2/] All information and quotations from Mr. Salett are based upon an interview with him in the fall of 1969.

1. Use of a Contract Agency

Stanley Salett and Sanford Kravitz, who had watched the first national emphasis program, Head Start, place its administrators under incredible strain due to the frantic pace needed to meet bureaucratic requirements, were convinced that if there were to be a national Upward Bound program, its administrative structure ought not to duplicate that of Head Start. Instead, they felt that Upward Bound should be administered on a pattern used at agencies such as the Defense Department, which was contracting with outside agencies in order to gain major management potential and maintain flexibility at the same time. This idea was discussed in OEO and with personnel at the American Council on Education (ACE) in the late summer of 1965. Salett felt that "an established contractor did not exist but there were some groups around the country who had administrative experience with Federal and private pilot programs."

One such group was the Institute for Services to Education (ISE) founded as a nonprofit corporation in Pittsburgh, Pennsylvania in April 1965. The history of ISE began at a meeting called by the ACE in October 1963 "to consider ways of expanding opportunities in higher education for disadvantaged youth." At that meeting an ad hoc committee was formed, called the Curriculum Resources Group (CRG). In 1965, CRG attached itself to Educational Services, Incorporated (ESI) which was operating six Upward Bound pilot projects. The ad hoc committee separated from ESI and ACE in April 1965 and became ISE, with John C. Warner, past president of Carnegie Institute of Technology, as ISE chairman and president.

Conversations between OEO and ACE staffs led to the submission by ISE of a proposal to provide Upward Bound with administrative services. On September 29, 1965 OEO signed a contract for the period October 1, 1965 to September 30, 1966 for just under one million dollars. Dr. Frost assured Sargent Shriver that ISE and its director, Dr. Robert Christin, would not make policy for Upward Bound but would only carry it out.

This contract agency arrangement was to be an administrative blessing at the beginning of Upward Bound. It allowed for speed and flexibility so that Dr. Christin, and his assistant Mr. Joseph Kernan, were able to assemble a staff and complete much of the grant processing operation within about 90 days after receiving 250 proposals in January 1966. Dr. Frost believes that without this ability to act swiftly Upward Bound "would never have gotten off the ground."[3]

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[3] All quotations are taken from two interviews conducted with Dr. Frost in the summer and fall of 1969.

2. Preparation of Guidelines

Mr. Salett was assigned to outline for Dr. Frost the directions the summer pilot programs had indicated that Upward Bound should take. However, Dr. Frost felt that, in some ways, the pilot programs were only used to "show that much of the program was locally inspired." Frost also noted that, "As a matter of fact, no one connected with the pilot programs (except Dr. Christin) was involved in writing the 1966-1967 Guidelines, and we paid little attention to the pilot programs as a package."

But Dr. Frost did note that people like Dr. Thomas A. Billings from Western Washington State College "were most useful in polishing, editing, and quarreling about the Guidelines." Salett held a meeting in September 1965 of all pilot program project directors. Dr. Frost "borrowed more from people than from the pilot programs as such." He did not attend that September meeting.

The five persons, Frost, Simmons, Billings, Christin, and Fred Bresnick who came to Upward Bound as an education specialist, who were most concerned with the form and character of the national administration of Upward Bound and who were largely responsible for the early Guidelines, were at that meeting. Almost all of this group continued to contribute to shaping Upward Bound national policy for almost four years, until July 1969.

3. Guidelines on Recruiting

One of the most significant statements hammered out at the meeting, and incorporated into the 1965-1966 Guidelines, [4] was that:

> Students selected for the Upward Bound project shall be those who meet and who have potential for successful college work, but whose level of achievement and/or motivation would seem to preclude their success in an accredited college or university.

This statement was followed by an admonition not to rely solely on grades and test scores in recruiting students but to utilize various "subjective" criteria such as "intuition" and "personal interviews." In concluding this subject, the Guidelines said:

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[4] For the convenience of the reader, pages of the last Upward Bound Guidelines issued by OEO, for 1969-1970, appear as Appendix B in this report.

> OEO expects that academic institutions will select some students of considerable academic risk.

At national project directors' meetings in the spring of 1966, Frost and Christin described the Upward Bound student, as one who "sat in the middle or the back of the room," the kid who, though quite probably capable on some as-yet-unmeasured standard, had "turned off" on schooling; the one who was not an obvious "winner." Dr. Frost was concerned that programs, in order to be successful, might load up with "winners," thus producing a high college-going rate but would not be carrying out the program mandate as he saw it. He and others at Upward Bound, ISE, and OEO suspected that this was a factor in the fantastic success of the 1965 Bridge program students since a single summer of Upward Bound could not, it was believed, by itself have produced an 80 percent college-going rate. OEO saw Upward Bound as a program for poor youngsters to escape from poverty through education. As such, basically bright and able students who were poor would probably not need Upward Bound, as they were probably headed to college and out of poverty already.

These doubts raised about the type of students recruited for Upward Bound led Dr. Frost to expand the emphasis in the 1966-1967 Guidelines from college-going goals to include "other post-secondary institutions." This was done knowing that, for some students, it was possible that a college education might be a mistake either because the students or the Upward Bound staff felt their chances of academic survival were limited, or because the students discovered that they would rather become, for example, a plumber than a sanitary engineer. What the phrase "other post-secondary" did was broaden the options for the Upward Bound graduate while keeping the central focus of Upward Bound as the OEO precollege program. One of the ways Dr. Frost discouraged overrecruiting of "winners" was the emphasis in the Guidelines on the recruitment of "academic risk" students. In the second year of his tenure the request was for a "considerable" number of such students.

In 1966, for the first year of the national program, the average Upward Bound recruit was a C+ student, and questionnaires administered that summer showed only 26.6 percent of the students had a Grade Point Average (GPA) of 3.0 or higher, with 69.8 percent in the 1.0-2.99 range.[5/]

[5/] Source of these figures is an ISE summary based on questionnaires administered to students in 1966 summer programs. GPA data are based on 13,438 students with an additional 5,530 (29.1 percent) students not responding. These data were compiled by Dr. Robert Strickler with the aid of Mr. Charles Mertens who were employees of ISE in 1966.

With the exception of the period from June 1966 until February 1968, there is no controlled longitudinal information available on Upward Bound students' high school grades. At the time the national effort got under way in the summer of 1966, Upward Bound did contract with David E. Hunt and Robert H. Hardt at the Youth Development Center of Syracuse University to prepare an evaluation of the program which is described in detail in Chapter VI.

The instruments used in the Hunt and Hardt studies included a large number of attitude-change measures given at the start and close of the 1966 summer programs. Results in 1966 showed increases on the following measures:

	Programs Where Majority Showed Improvement	Sample Size
Possibility of graduating from college	16	21
Motivation for college	20	21
Self-evaluation of intelligence	18	21
Self-responsibility (or internal control)	20	21
Interpersonal understanding	17	21
Self-esteem	16	21
Alienation	no change	
Attitudes toward planning for the future	no change	

It was hoped that alienation would decrease and planning for the future would increase--but in both cases it was assumed that one summer's experience had not been long enough to show significant changes in these areas.

The Hunt and Hardt analyses of high school grades showed grades of students actually decreased slightly. Various explanations were offered for this phenomenon including, again, the limited amount of time the students had been in the program. A study, conducted by Greenleigh Associates in the fall of 1968, which showed that Upward Bound was having a minimal impact upon the high schools and the community, may also explain why no increase in GPAs was found by the Syracuse contractors.

In addition to educational and attitudinal advancement, Upward Bound, according to Dr. Frost, was attempting to effectuate a genuine linkage between two groups of people--the poor but able kids who were in an educational and racial minority, and the institutions of higher education which had a poor record of working with and for this population.

There are certainly exceptions to this description of both the institutions and of the Upward Bound students. On the institution side there are a number of colleges and universities, throughout Appalachia and the Southeast in particular, who had been fighting the war on poverty long before 1964 and who saw Upward Bound as a chance to enhance what they had been doing--with virtually no money and great tenacity and varying success--for many years.

Among Upward Bound students, there were, and are, students who probably do not "need" the program as much as some of their peers. Some of these students either were not as financially or academically disadvantaged or were among those for whom college had already been more than a possibility, even a planned-for event. As Mr. Salett pointed out:

> the Guidelines said, "We want high-risk kids." This is a little like saying to a southern school district "we want some desegregation." The question becomes "How much?" and "What evidence do you have to have?"

4. Lack of Publicity

This uncertainty and confusion about the type of student in Upward Bound exists also in the mind of the general public. From the beginning, the amount of publicity the program received was minimal although Sargeant Shriver, when he announced the first grants in April 1966, told Dr. Frost and Mr. Salett that he wanted Upward Bound to be a major program with major publicity, like Head Start. It never happened.

The local press was, almost without exception, good to individual Upward Bound programs--especially those that were not in large metropolitan areas where it is more difficult to get press coverage. But at the national level, the publicity was spotty when positive and only seemed to be pervasive when, in the opinion of Upward Bound administrators, there were stories that reflected poorly on the program.

The OEO Office of Public Affairs did make an Upward Bound film, entitled Space to Grow, which was shown on some of the stations of the National Educational Television network, and the contract agency did publish a magazine, Idea Exchange. But major positive publicity with broad circulation was rarely achieved.

The reason the publicity issue is so important is that many of the facts about Upward Bound seem to show startling and dramatic success. In 1966 more than 200 programs worked with 25 million Federal dollars to increase the chances for college for over 20,000 students who were enrolled in the program that year. There is no question that the program was educationally and politically attractive: increasing educational opportunity, and thus mobility out of poverty, is part of the American dream that sees education as a great equalizer.

5. Relations with CAP

Another major issue was the relationship of Upward Bound to the Community Action Program (CAP) of which it was a part in the structure of OEO. Most of the pilot programs were financed under the Research and Demonstration Section (207) of Title II, but the program from 1966 onward was financed out of CAP program monies directly (Section 205).

Since Upward Bound was a national emphasis program it was not administered by the OEO Regional Offices. Most grantees were institutions of higher education rather than the local Community Action Agencies (CAAs) of CAP. CAAs could "apply" for an Upward Bound program as long as an institution of higher education was the delegate agency for the actual running of the program. However, because this tended to slow down administrative and fiscal procedures and, perhaps, because the universities did not wish to get too closely involved with nascent and politically cumbersome agencies, only 33 CAAs served as grantees in 1966 and only 8 by 1969.

a. Linkages

The first Guidelines, which contained a whole series of linkages between CAP and Upward Bound, made it clear that Upward Bound was to be run by the universities. Dr. Frost argued that to make Upward Bound solely a CAA-sponsored program would make many colleges and universities refuse to participate fearing that their integrity might be endangered if they took administrative directions from a local CAA. On the other hand, CAP staff argued that the spirit of "maximum feasible participation" applied to Upward Bound just as it did to any other CAP program.

The dilemma was never conceptually resolved, especially since the persons involved were largely sympathetic to the ideas of the other point of view. Frost, Christin, and their national Upward Bound staffs certainly knew they were a part of the poverty program and were proud of it. And CAP personel knew there was something unusual about dealing with colleges and universities in a poverty context. After all, many of the CAP people come from such educational institutions.

However, according to Dr. Frost, "If it had not been for the personal interest of Sargent Shriver in the program it certainly would have become part of the CAP system, if not in the first Guidelines then shortly thereafter." On the other hand, Frost wanted the CAP and CAA relationships to "tactfully link colleges to the poor so that Upward Bound would not be walled off inside institutions, a sort of Hertz rent-a-Upward Bound program." Finally, a series of compromises were worked out and appeared in the 1966 Guidelines and, with modifications, in all issues of the Guidelines since then. These compromises established linkages with CAAs including the forming of Public Advisory Committees (PAC) which would have a significant number of poor persons on them; encouraging CAAs to help in recruiting Upward Bound applicants; and having the local CAAs "check" proposals before they were approved in Washington.

In fact, these linkages were so loose that the relationships between grantees and the community which the Upward Bound students represented were not satisfactory according to most of the people involved. Project directors as well as several national Upward Bound personnel, almost uniformly expressed the feeling that the PAC was an excellent idea, but that few projects ever got it to work. The CAA check on proposals was, more often than not, a forced encounter between the project director and the CAA staff, rather than a genuine sharing experience. CAAs did, in many cases, help recruit students.

b. Use of Indigenous Personnel

Another problem which arose between Upward Bound and CAP came from the desire of CAP people to hire indigenous nonprofessionals wherever possible in OEO programs as part of its "maximum feasible participation" mandate. However, most of the personnel in the national office, the contract agency, and in the local projects, said they did not know how this CAP goal could be implemented in Upward Bound. There were exceptions where community persons supervised nonacademic components of summer programs such as dormitories or recreation programs, or served as community liaison personnel during the academic year. In the few projects where such arrangements were set up, sometimes over the objections of university professionals, they seem to have worked well.

The many questions that the whole CAP-Upward Bound relationship raised were, by and large, not successfully worked out during the time Upward Bound was in OEO. While the poverty program might be seeking the same kind of social educational goals sought by the colleges and universities, the difference in point of view did not lead to real relationships between many Upward Bound programs and the CAP community. Perhaps Upward Bound was ahead of its time in asking colleges and universities to try to build relationships with the Upward Bound student community that they are just now trying to learn to build with and for their regular student bodies.

6. Site Visits

The monitoring system that did provide large amounts of information was the regular site visits by consultants, hired by the contract agency, who usually visited each project once during the year. Consultants were sought who were familiar with the particular geographical area, with the university, and with the impoverished students. In the beginning it was somewhat difficult to find people with this combination of background and talents, but after some experience more consultants from minority groups, more project directors, ex-project directors, and ex-contract agency people were used in this role.

The purpose of these site visits, which took two days, was for an outsider to take an objective look at the program and write a report for the national office. These confidential reports went to the National Director and the contract agency persons responsible for that program. While these reports were felt to be invaluable by those who read them, they caused continued concern to those who were being written about but who did not see them. This problem of feedback of information to the project director, his university, and the Upward Bound staff and students, was aggravated because the site visitors served only as relays for, not as implementors of, policy, and were instructed to listen rather than talk. This often resulted in a lack of any reassuring communication to project personnel concerning the results of the visit. To this day, site visitors are thought of, and often called, the "Federal Inspectors." Project personnel did not believe that a site visitor was not an evaluator. While the national Upward Bound office was aware of this problem, only twice were letters written to inform projects of possible strengths and weaknesses as they were perceived by site visitors.

The contract agency staff did, however, talk informally with project directors on the telephone, during staff visits to the program, or during one of the regional or subregional project directors meetings held annually since 1967. These conversations were considered very valuable by the project directors. However, they did help to mislead program people into confusing the contract agency with the national Upward Bound office as the policy-making group for the program. This confusion was added to by the corporate changes in the contract agency from September 1965 until July 1969. The agency was, in turn, the Institute for Services to Education (ISE), Educational Services, Incorporated (ESI), Educational Projects, Incorporated (EPI) and finally became independent as Educational Associates, Incorporated (EAI). Dr. Christin remained as director of the contract agency throughout.

One of the first consultants hired by Upward Bound was the project director of one of the pilot programs, Dr. Thomas A. Billings of the School of Education at Western Washington State College, Bellingham, Washington. When Dr. Frost, who had been on leave from Reed College from January 1966 until August of 1967, recommended to Sargent Shriver that Dr. Billings become the new National Director of Upward Bound, he described as one of Billing's assets his "having seen more Upward Bound programs than any other person."

7. Summary of Dr. Frost's Tenure

During Dr. Frost's tenure Upward Bound grew to be a national program that certainly had, overall, more progress and successes than problems. Many of the topics discussed in this section of the history have not been set up precisely in their chronological place but involve issues or characteristics which not only affected the entire period of Dr. Frost's directorship, but continue to affect the program. There is every indication that they will continue to be central characteristics of Upward Bound under the OE in 1970-1971.

There is absolutely no doubt that Richard T. Frost gave shape, direction, morale, and spirit to Upward Bound and was, to a large degree, responsible for the functioning of Upward Bound during its first two years. It is a further tribute to Dr. Frost that his belief in flexibility extended to administrative change. In Dr. Billings he recommended a man different enough from himself so that those traditions he established would be respected only if they were still useful and had not been outgrown. The two men have a deep and abiding respect for each other and, in a sense, complement each other's view of the world and of education.

E. Dr. Thomas Billings - Second National Director

By the spring of 1967, when Dr. Thomas A. Billings came to Washington as Deputy Director of Upward Bound, and Dr. Frost spoke to him about becoming National Director of Upward Bound, Dr. Frost believed that the program "would be lucky if it spends one more year in OEO." He was reflecting both the increasing Congressional criticism of the entire OEO and the specific desire of Congresswoman Edith Green of Oregon, Chairman of the House Special Subcommittee on Education, to see Upward Bound in the OE as soon as possible. A partial cause of her desire to effect the transfer, according to Dr. Frost, was that "Mrs. Green felt she already had a high school student Head Start program for which she had been responsible, the Talent Search program," already in operation at the OE.

So the atmosphere in which Dr. Billings became National Director, on August 4, 1967 was mixed: Upward Bound had grown from 17 programs in 1965 to 215 in 1966 and was just completing 249 summer projects in 1967; the Upward Bound budget had increased for the 1967-1968 programs to 28 million dollars. But the success and growing acceptance of and interest in the program was mixed with a foreshadowing of the possible Congressional action to come.

1. Shift in Type of Students Recruited

Upward Bound was conceived as a "war on talent waste," which is probably another description for what educators call "the problem of the disadvantaged underachiever." To solve the problem of the student who has the talent and ability to achieve more than he or she is now achieving requires both academic and motivational help.

Upward Bound, like Head Start and most of the programs of the Elementary and Secondary Education Act, was based on the assumption, first, that compensatory education is needed to bring the achievement level up to where it can and should be; and second, that any program which does not attempt to motivate the student to achieve is doomed.

Dr. Billings had come to Washington with two experiences that were not a part of Dr. Frost's background: he had taught in a public school system and he had been an Upward Bound project director. From this prior contact, Dr. Billings determined that Upward Bound should change its attitude toward high schools. Toward the end of including them more fully in the operation of Upward Bound, Billings created a national High School Principals Advisory Committee in 1968. He felt this was "one of the most positive things I did in OEO in two years.[6]

Also from his close contact with, and understanding of, high-school-age youngsters, Dr. Billings wrote in the Upward Bound Guidelines of 1967-1968:

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[6] All quotations from Dr. Billings are from two interviews conducted in the summer and fall of 1969.

> While Upward Bound's central assignment is practical and down-to-earth, and while we must talk about our achievements in relation to that assignment in terms of program and college attrition, admission, and retention, Upward Bound is not and should not become a national conveyor belt mindlessly processing youngsters for the nation's work force as if they were so many carrots to be canned, so many units to be programmed. Hopefully, our programs will assist all of our youngsters to become competent and effective participants in the American social and economic order. But beyond that our programs should assist Upward Bound youngsters to become sensitive human beings, free, informed, and committed to the human struggle for excellence.

The problem of how to reach underachievers who could be motivated was one which had preoccupied Dr. Frost. He had shifted emphasis from the 1966-1967 Guidelines calling for "some students of considerable academic risk . . . who have the potential for successful college work but whose level of achievement and/or motivation would seem to preclude their acceptance in an accredited college or university . . . " to "a considerable number of students who are academic risks in the conventional sense . . . who have potential in college or other postsecondary education . . . "

As a high school teacher and an Upward Bound project director, Dr. Billings had come to know not only what kinds of youngsters could go on to college, but who could complete the course, an end he viewed as essential if the poverty cycle were to be broken. Thus, in the summer of 1967, he elected to give project directors, in his words, a "slightly harder signal" concerning student recruitment.

His "signal" took the form of deleting the phrases "considerable academic risk," and other postsecondary institutions," which he felt might lead to selection of Upward Bound participants who could not achieve the program's educational, and resulting improved economic, goals--and, to underline his concern for the ultimate betterment of recruits, he added the phrase:

> In no case should a youngster be invited into Upward Bound unless the project staff firmly believes that the youngster has some genuine likelihood of eventual success in college.

He proposed these two changes in a series of meetings with Dr. Christin and the contract agency staff and with project directors. However, neither change appeared in the draft version of the Guidelines prepared by contract agency staff and Fred Bresnick in the summer of 1967. Dr. Billings himself made changes over the objections of some contract agency staff and some consultants, arguing that:

> ...There was increasing evidence that project directors were recruiting students who could not profit from Upward Bound by going on to college. Proof of this "romantic" approach to the program was the lack of "solid academic emphasis" in some programs in favor of a "fun and games" or "love them" approach which, in reality, "cheated" all concerned.
>
> ...Upward Bound was a precollege program. If it sent large numbers of kids to "other postsecondary" institutions, it would be diluting the central thrust of the program. In addition, Congress measured success in terms of how many kids went to, and stayed in colleges.
>
> ...In a continuum, with the Job Corps enrollee at one end of the spectrum and the bright, achieving student at the other, Talent Search was about in the middle and Upward Bound was veering too close to Job Corps. Upward Bound was intended to serve underachievers, not low achievers, not students who had little potential for success in college.

It was feared by some staff members that project directors would take the new Guidelines as license to go out and recruit the "winners" that Dr. Frost had not wanted to predominate in the program. They further feared that, by being "more selective and careful in throwing out the recruiting net," recruiters would revert to the grades-and-test-scores syndrome to select "the right students" for Upward Bound.

One measure of the actual effect of the modified selection policy which is available for Upward Bound entrants is Grade Point Average (GPA) at entry. These averages showed a slight change in 1968 but in 1969 there was a significant change in GPAs which may or may not have been a delayed reaction to the new Guidelines for recruiting.

Whatever the reason for changes in GPAs, a large number of project directors had a deep feeling that both the program and its students had changed.

Table 1

Mean Grade Point Average at Entry by Year (in percents)

Director	Year New Students Started Summer Program	GPA At Entry	Plus or Minus Over Previous Year
Frost	1966	2.46	-
Frost	1967	2.27	-.19
Billings	1968	2.38	+.11
Billings	1969[a]	2.92	+.54

[a] Table 7, Grade Point Average at Entry for Upward Bound Universe, Chapter V.

2. Development of a Data System

Evaluation has been part of Upward Bound since 1965, first in Dr. Paul Daniel Shea's studies of the 1965 students and later in the eight reports of the Syracuse team. Dr. Billings believed that he needed a more quantitatively oriented system with the capacity for frequent feedback and updating of information. The sort of data system that was needed, according to Dr. Billings, would be "a clock with 23,000 moving parts that can tell me the time once a month.

In October 1967, Drs. Billings and Christin hired Mr. Charles B. Cole to create and manage a data systems office as part of the contract agency. Once the Cole system became operational in April 1968, the quantity and quality of Upward Bound data, especially on college going, changed rapidly for the better.

In the fall of 1967 and spring of 1968, Cole and the contract agency staff designed and sent to every project a set of forms and an Upward Bound Data Systems Manual so that core demographic data, SES data (age, race, sex, social security number, size of family, etc.), and reasons for leaving college (marriage, military service, etc.) would be available on each present and former Upward Bound student. Project directors were asked to supply such data not only for the current (spring 1968) students but also for all students who had joined or left their project since June 1, 1967.

Because the existing data system did not become fully operational until April 1968, data are a great deal more complete on students enrolled in the program after that time. A series of studies has been undertaken to provide basic information on students enrolled prior to that date. The data system currently has data of varying completeness on 50,000 students.

Project directors themselves rarely received more than summary results of a study, often in the form of a press release. Among their comments were:

> ..."I have never seen any research. They never sent me any to comment on or read."
>
> ..."Since the Guidelines forbid us from undertaking research at the local level, I have never seen anything that had anything to say about the kids we worked with here."
>
> ..."The only figures I ever saw had to do with some national averages on students and on the percentage who went to college. They didn't say whether that was what we were shooting for."

3. The New Orleans Conference

In addition to problems of student selection, and the need to develop a data system, Dr. Billings' tenure coincided with the period of growing racial unrest which threatened to involve Upward Bound students.

Upward Bound had had to contend with urban riots around it from its beginning. There was not a summer from 1965 to 1969 that Upward Bound records do not show the effects of civil unrest on some projects, and on their staffs and students. While there had been no actual riots in Upward Bound programs, project directors were naturally concerned since people from the communities where Upward Bound students lived were among the participants in riots. In the fall of 1967, Dr. Billings invited about 50 project directors and an equal number of informed and concerned "observers" to "lock themselves up for a couple of days to face some of the crises that were affecting the country," and thus, of course, the Upward Bound programs across the country. They met in New Orleans from January 16 through 19, 1968. Billings asked the assembled group to consider these questions:

> ...Are there any suggestions that might help university personnel to minimize racial tensions and unrest during Upward Bound programs next summer?

...Would guidelines for host colleges detailing experiences and strategies used to date and amplified at this conference be helpful to host colleges?

...Is there a way to involve black militants constructively in Upward Bound?

...What should project directors do when racial tensions do become explosive on a campus or in an Upward Bound project during a residential summer?

What happened in New Orleans was, for many of the participants, a highly charged, emotional experience. Emotion had to be translated into argument and argument into policy recommendations. But the arguments tended to "polarize," a term which has since become stylish, because of the manner in which a black caucus presented a position paper which made six separate recommendations:

1. Black Leadership - OEO should require any Upward Bound project that has a majority of black participants to have a black director--preferably male.

2. Curricula - A major objective of the Upward Bound program must be to increase the black child's academic competence and pride in his culture, values, and environment.

3. Parental Participation - greater efforts must be made to help black parents acquire the skills to support the education of their children and an understanding of that education which would enable them to hold Upward Bound accountable.

4. Community Control - By giving resources to the colleges, Upward Bound perpetuates the isolation of educational institutions from community involvement and control. The black community, and not just the colleges and universities, must be involved in control of the resources, and in developing the educational programs.

5. Admission of Upward Bound Graduates to Host Institutions - OEO should require host institutions to admit a minimum percentage of their Upward Bound students. It should also require these institutions to establish supportive academic and other appropriate components.

6. Annual Black Conference - It was recommended that OEO or Upward Bound fund an annual meeting of black Upward Bound personnel and consultants selected by the black staff members.

Conference participants quickly agreed that Upward Bound could not meaningfully attempt to contain or prevent riots.

After the presentation of the unscheduled black position paper the conference agenda was rearranged to allow for a discussion of the issues it raised. The New Orleans Resolutions, as they came to be called, are not identical to, but are clearly an outgrowth of, points covered by the black caucus. It was recommended that:

...Upward Bound programs with a plurality of black students be directed by a black person, preferably male.

...Upward Bound programs with a plurality of any particular racial or ethnic group be directed by a person of that racial or ethnic group.

...Top priority be accorded to family and community liaison components in the present Guidelines that deal with the relationship between the project and the community.

...Neighborhood groups be given a more effective voice in determining Upward Bound policy.

The first two recommendations sought to remedy the fact that there were less than 50 minority project directors in the 250 programs operating in the academic year 1967-1968, or approximately 20 percent in a program that enrolled about 65 percent of its students from racial minorities.

The Upward Bound National Advisory Council, chaired by Dr. Arthur Flemming, met on April 20, 1968 to consider the recommendations of the New Orleans Conference and unanimously endorsed the recommendations which Dr. Billings then distributed in a memo dated April 29, 1968. The memo, which asked that "host colleges attempt to fulfill the intent of the recommendations in their current staffing patterns," went to all project directors and their college presidents and some reaction was swift.

By early May, Billings had received several letters which, in summary, contended that the recommendations, especially those dealing with project director selection,

> represent a direct interference of your government office into the whole area which has been, and should continue to be, decided upon by college and not Federal authorities. Your April 29, 1968 memo may destroy some of the flexibility that we all believe is central to Upward Bound.[7]

Billings' response to these letters was, in part:

> Let me assure you, the memorandum in no way impinges upon the proper exercise of institutional judgement. The memorandum is not a policy directive; it contains a series of recommendations generated at the New Orleans Conference and subsequently endorsed by the National Advisory Council. If host colleges and universities have sound reasons for rejecting these recommendations, certainly they are free to do so. Happily, most of the colleges have already taken significant steps to implement the recommendations before they were published.

The project director issue became the focal point for people connected with Upward Bound when they spoke of the New Orleans Conference and other recommendations tended to be underemphasized. Rather than seeing these other recommendations as new policies,the April 29 memo noted that:

> Recommendations numbers three and four are a restatement of current Upward Bound Guidelines. The New Orleans Conference delegates and the National Advisory Council are stressing the seriousness which should attend certain aspects of an Upward Bound program. I strongly urge all project directors to review their current contacts and ties with the families, neighborhoods and communities from which their students are drawn. If these relationships are shallow, I request that you strengthen and deepen them immediately.

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[7] Rather than being a direct quotation, this is a close paraphrase of a letter sent by a College president to Dr. Billings. The reply which he wrote is also paraphrased.

For many project directors in New Orleans the questions raised by recommendations 3 and 4 had concerned issues of community control, not issues already in the 1968-1969 Guidelines. The legality of the project director recommendation was questioned in several letters to OEO and by Representative Edith Green who, according to the Congressional Record of June 26, 1968, felt that the April 29 memo might be illegal under the Civil Rights Act and that it was a case of "reverse discrimination."

On June 5, 1968 Dr. Billings sent a second memo to Upward Bound host college presidents reiterating that the proposal had been endorsed by the National Advisory Council, and noted that:

> ...while the Civil Rights Act of 1964 forbids selection of personnel paid from Federal grants on the specific grounds of race or ethnic identity, it is perfectly proper to select individuals who meet the needs described in the four criteria above on an individual basis. Such individuals would usually, but not necessarily, come from the same ethnic groups as the bulk of their students. Because of the critical importance to the success of Upward Bound programs in securing directors who meet these qualifications, I urge that this memo be implemented as soon as possible.

Actually the legality of the April 29 memo was never formally tested. In December of 1968, acting on Dr. Billings' request, the Deputy General Counsel of OEO wrote to the Department of Justice for an informal ruling, but the issue was never resolved. The April 29 memo thus became de facto Upward Bound policy.

Other new policies, which appeared in the first Guidelines written after New Orleans, were entitled "Admission of Upward Bound Students at the Host College" which reflects the fifth point in the black caucus paper:

> Past experience has shown that a student is more likely to be successful if he attends the college which hosted the Upward Bound program in which he was enrolled. It is therefore expected that a college sponsoring an Upward Bound program will admit some of its Upward Bound students.

In the 1970-1971 OE Guidelines for Upward Bound the issues of New Orleans are present in a form that changes the language on the project director recommendation, but which still tries to face the issue. The other recommendations, which were perceived as an extension of existing policies, are reemphasized.

4. Budget Cutbacks

The next major obstacle confronting Dr. Billings was the increase in Congressional criticism of OEO programs generally, and, to a lesser extent, of Upward Bound specifically, which eventually led to its transfer from OEO to OE. Programs and budgets (meaning how many students were to be enrolled) were an obvious focal point of attack.

The Upward Bound budget, which was only a small segment of the increasingly controversial OEO, showed no increase for the two years from July 1968 to June 1970, and Upward Bound programs operating in 1971-1972 under OE may have less money.

The President's budget for fiscal 1969 included an $8 million increase for Upward Bound, and Dr. Billings initiated 36 new programs to begin in summer of 1968. The actual OEO appropriation, however, as it was passed in October of 1968, did not provide for the increase. As a result, most of the ongoing projects had to absorb a budget cut of 7 to 13 percent when they were renewed for the 1969-1970 year. This cut was from project funding levels of the previous year, 1968-1969.

Table 2

Upward Bound Budget, Programs, and Students, 1965-1970

Summer	Number of Programs Operating	Number of Students Enrolled	Federal Dollars Expended (millions)
1965	17	2,061	2.4
1966	218	20,333	24.9
1967	249	22,440	28.2
1968	285	25,368	31.6 [b]
1969	296	23,220	30.9 [b]
1970 [a]	295 [a]	22,000+ [a]	28.3 [a] [b]

[a] Estimate.

[b] Beginning with 1968 programs the Federal share of all OEO grants was decreased from 90 to 80 percent, and the local share increased to 20 percent.

In 1966, when the national program was mounted, a cost guideline of approximately $1,250 per student per year in Federal funds was established. Though this figure had regional variations from about $885 to more than $1,800, it did serve as a national average. From 1966 until the present most programs had been asked to maintain the same Federal dollar level until the 1969 budget cut. The Federal share, by remaining the same and then decreasing 7 to 13 percent, has been worth steadily less. As Table 2 indicates, when budget cuts took effect in 1969, Upward Bound enrolled fewer students. Two other things were done in the face of decreased funds and increasing local costs: many summer programs were shortened in length from eight or seven weeks to six weeks or less; and projects began to cut out recreational and extracurricular activities. Thus the number of programs held steady or even increased slightly, but with either fewer students or less program or both.

5. The Froomkin Report

Meanwhile, critics of Upward Bound gained new ammunition with the issuance, in May 1968, of a report by Mr. Joseph Froomkin, Assistant Commissioner of Education for Program, Planning, and Evaluation of OE. Mr. Froomkin had been assigned to "provide an analysis of selected Federal programs for higher education." One of the programs analyzed was Upward Bound and what Mr. Froomkin had to say was, according to Dr. Billings, "certainly one of the most damaging things that happened to Upward Bound."

Froomkin, who studied the 1965 pilot summer only, brought to public attention the fact that 80 percent of the participants had entered college, 12 percent had dropped out during freshman year, and only 50 percent had returned for their sophomore year.

He urged no program expansion until the program showed greater success in retention since "members of minority groups do not seem to benefit, in terms of income, from a less-than-full college education." He stated a preference for Talent Search as a cheaper, more effective program which concentrated on potentially good college risks.

Billings had received a draft of the Froomkin analysis in summer of 1967, almost a full year before it was formally published. In August 1967 he replied to Froomkin's draft, noting that:

> ...Your facts are inaccurate: a) less than 12 percent of first year Upward Bound graduates dropped out of college during their freshman year....It is far too soon to announce that "only a miniscule proportion of Upward Bound students are likely to graduate from college."...From my point of view, and it is widely shared in academic circles, Talent Search does not "appear to be a more attractive program." It seems to me we have far too little evidence to make such judgments.

By January 1968, the press was being informed about much of the Froomkin material and was beginning to print parts of it. Dr. Billings wrote Commissioner of Education Harold Howe complaining that in spite of his memo, "it seems curious that the inaccuracies remain in the report, and even more curious that they have been published in news media across the nation."

Mr. Froomkin replied that the data concerning the 1965 pilot group

> ...is not only accurate, but was presented publicly to the Senate by your predecessor, Dr. Richard T. Frost, accompanied by you, on Tuesday, June 27, 1967.
>
> ...Nothing in my report is at variance with the information you presented to the Senate; with information contained in your memorandum to me of August 25, 1967; nor with information contained in your memorandum of January 29, 1968, addressed to Commissioner Howe.

Although the Froomkin preference for Talent Search as a less expensive, more effective program was a hidden agenda item in the House Education Committee hearings which led to the Congressional decision to transfer Upward Bound to the OE, the public controversy over Froomkin's report revolved primarily around the college retention rate of Upward Bound graduates.

In a further explanation of Froomkin's different interpretations, Dr. Billings, in February 1968, wrote:

> The reason for the inaccuracy is: Froomkin based his report on the data available to us in April, 1967 and reported by Dick Frost in his Senate testimony. These college retention data were prepared for us by Paul D. Shea, Director of the Primary Prevention Center, in Newton, Massachusetts.
>
> Shea's April report was based upon an inconclusive sample of our 1965-66 graduates. Frost asked him to continue his data collection and by November, Shea was able to update and revise his report. The November report, based upon a much larger sample, changed the college retention figure markedly. Unfortunately, Froomkin did not include this revision in his report; it simply wasn't available to him at the time of his study.

The OEO issued a press release updating the Froomkin figures as follows:

> Current data on Upward Bound graduates are as follows:
> 1967 - 79.5 percent admitted to college (3,861 of 4,855 graduates)
> 92 percent of the 3,861 are still in college
> 76 percent are in good standing with better-than-average chances of continuing next year
> 16 percent are on academic probation, while
> 20 percent of all freshmen in the United States are on probation
>
> 1966 - 78 percent admitted to college
> 71 percent are now sophomores (866 students) while,
> 75 percent nationally have continued as sophomores

1965 - 80 percent admitted to college
57 percent are now college juniors (1,262 students), while
62 percent of national college population make it to junior year

Dr. Billings termed the report prepared by Joseph N. Froomkin premature and thus inaccurate. Billings asserted that the Froomkin Report was not based on independent study or research, but rather relied on testimony presented to a Senate Committee by this office in April, 1967. The Froomkin report confuses partial, incomplete data with final data; tabulating youngsters as "dropouts" or "casualties" when, in fact, they were simply unreported at the moment of his writing.

The figures Froomkin had used were for those students who were in Upward Bound for the shortest time, usually only one summer (1965 or 1966). The real measure of college retention is the large number of Upward Bound graduates who entered college in 1967, 1968, and 1969, after a period of time in the program.

6. Decision to Transfer Upward Bound

The Froomkin report was not, in itself, a cause of the Congressional transfer of Upward Bound but, rather, it focused attention on areas which were already concerning critics of the program.

Upward Bound was mandated to serve disadvantaged students who had the potential for college. The question was how visible and what kind of potential that should be. On the one hand, if Upward Bound was to serve basically able disadvantaged students who only needed information and some precollege counseling, then Talent Search already existed for just this purpose.

If, on the other hand, the Upward Bound target group needed more than just counseling, then the program might well be working with students who were perhaps less fundamentally "deserving," in the eyes of its critics, of a special precollege program. Either way, Upward Bound was caught in the middle.

This issue led Representative Edith Green to argue that either Upward Bound was rewarding dropouts, or that it represented double administration since it was so much like Talent Search. In either event, she and others argued, the recruitment focus of the program was contrary to "the original intent of the legislation." [8]

Upward Bound was also caught in the general criticism of OEO as an untraditional agency which was overly flexible in operating its programs (including such other controversial projects as Legal Services, Head Start, and Job Corps). Representative Albert Quie charged that those responsible for the fiscal and administrative policies of the contract agency (EAI) represented "Leeches that are using the money we are appropriating to help poor people." The final "outrage," was that Upward Bound, in the summer of 1968, in cooperation with the Experiment in International Living, had arranged to send 57 Upward Bound students abroad for the summer. This meant that the Upward Bound was expending Federal monies, in Mrs. Green's words, "so that dropouts could enjoy a summer abroad at taxpayers' expense."

Essentially these were the main arguments posed by members of Congress to support their statements that Upward Bound had been badly mismanaged and should be transferred to a more traditional agency such as OE.

Dr. Billings had sensed this mounting pressure from the beginning of his tenure. In trying to head off a confrontation with Congress, he considered two actions in 1967 which, had they been carried out, might have avoided the intensive Congressional probing which took place one year later since each dealt with a problem area that he perceived before it became a political liability.

a. Possibility of Not Refunding Contract Agency

In the spring of 1967 Billings had given thought to absorbing the contract agency staff into OEO but, aware of what a boon it had been to Dr. Frost for two years, he was hesitant to make the change and, finally, he approved the continuation of the arrangement with the contract agency. When asked to look back on that decision, he felt that it had been a mistake on his part, and that not refunding the contract agency would have caused far less programmatic trouble than the political trouble generated by this whole issue one year later.

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[8] All quotations from Mrs. Green in this section are taken from the Congressional Record, House, July 24, 1968, pp. H7407-7416, and the Record, House, July 25, 1968, pp. 7494-7499.

In considering not refunding EAI, Dr. Billings recognized that non-civil service personnel were doing civil service jobs. There was also the continuing, and not too successful, effort to assure grantees that the agency function was to administer and not to set policy. And, lastly, there was the question of whether the EAI staff was responsible to the EAI Director or to the OEO Upward Bound Director while they should, in fact, have been responsible to both. In the day-to-day operation, this dual responsibility was hard for the EAI staff to maintain and ambiguities resulted that were never resolved.

Both Upward Bound Washington personnel and project directors respected and praised the abilities of the contract agency staff members and their overall commitment to making Upward Bound work. However, once again the problem of communication was mentioned. Project directors felt that they received too little information which was helpful to them. Instead they received occasional memoranda which had to do with fiscal management procedures and the like. Contract agency staff were, more often than not, the persons to whom the project director turned for help with budgets, etc. But a number of the project directors felt that they were cut off from national policy and that the contract agency should have been more effective in bridging the gap between the field and the national office. Some project directors never were able to distinguish among conract agency staff, a site visitor, a consultant, or anyone else who had been sent by or from Washington.

b. Possibility of Administrative Transfer

Dr. Billings also recognized that Upward Bound could have been transferred to the OE administratively rather than legislatively. If the administrators concerned could have worked out an arrangement to do this, Upward Bound could have gone from OEO to the OE without some of the restructuring that resulted from the legislative transfer.

Dr. Billings discussed this with several Upward Bound consultants late in 1967 and in January and February of 1968. He believed that, if the program could be transferred with no legislative fanfare, its "survival chances would be correspondingly increased."

What Dr. Billings had not forseen was Sargent Shriver's pride in Upward Bound. Shriver vetoed an administrative transfer, although Billings argued that the program would suffer significantly less if this route were taken. But Mr. Shriver wanted to keep Upward Bound as an example, along with Head Start, of how successful OEO and its national emphasis programs could be.

Many people believed that a central mission of OEO was to create new programs and then, with their new ways of doing things established, to spin them off to more traditional agencies where they could be expected to infuse vigor and new ideas into older, larger, and traditionally more conservative agencies. Dr. Flemming, Secretary of Health, Education, and Welfare in the Eisenhower administration, believed that OEO was created as an "emergency agency," and that, if OEO and its program did not undergo regular change, then it "will become tradition-bound just like so many other agencies and programs."

Dr. Billings discussed the issue of administrative transfer with Mr. Bertrand Harding, who became Acting Director of OEO when Mr. Shriver left to become Ambassador to France. Mr. Harding suggested that they meet with Secretary Wilbur Cohen and Commissioner of Education Harold Howe of the Department of Health, Education, and Welfare in September 1968 to plan for an administrative transfer. Dr. Billings knew Commissioner Howe and believed that Upward Bound would be treated well under his administration. But it was too late. The House Special Committee on Education made it clear by early June 1968 that transfer of Upward Bound to OE was high on its list of Amendments to the Higher Education Act.

c. Criticisms and Charges Against Upward Bound

At the Committee Hearings, Representative Green charged that the Federal government was "actually financing with Federal tax dollars the activities of revolutionaries."

In support of the charges, Mrs. Green inserted into the Record letters, speeches, articles, a list of books, instructions for making a Molotov cocktail, how to set a fire, a pamphlet opposing the Vietnam war, etc. The source of the material was not identified in the Record. The OEO response[9/] to the charge of "financing revolutionary activity" involved explaining that all of the quoted material came from one Upward Bound program, Reed College in Oregon, and one staff assistant working in a special demonstration program

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[9/] "OEO Response to Congresswoman Green's Charges Regarding Upward Bound," Press Release, Office of Public Affairs, OEO, July 29, 1968. Unless otherwise cited, all the following replies to the charges are quoted from this release.

being operated by Upward Bound in the Oregon State Prison.[10] The staff assistant had been fired in April 1968 and the Upward Bound program at Reed College was terminated in June 1968. Dr. Billings had been aware of problems with the Reed College program and had personally met with Mrs. Green early in 1968 to discuss them, but he refused to terminate the program until its yearly grant expired on June 30, 1968. The situation was complicated by the fact that Reed was the home college of the former Upward Bound National Director, Dr. Frost. In addition, like most schools that have a reputation for being "liberal," Reed College had its share of detractors. These factors coalesced and Reed College became the example of what was wrong with Upward Bound in the eyes of the Congressional critics.

The second series of charges involved the fiscal and administrative practices of the contract agency, EAI. Specifically it was charged that Dr. Frost was a member of the board of EAI while serving as an Upward Bound consultant, and thus open to a conflict of interest charge, and that the contract had been awarded to EAI as the low bidder and then had been increased substantially.

The charge against Dr. Frost was disclaimed by the Acting President of Reed College, by OEO, and by Dr. Frost himself. He stated that he had never served on the EAI board and OEO believed his expertise concerning Upward Bound made him a logical choice as a site visitor. Because Dr. Frost also taught in the Oregon prison program, and was quite visible in Upward Bound in the Portland area, some Congressional critics concluded that his responsibilities and his interest overlapped.

As for the EAI contract, Representatives Green, Quie, and others felt that the assignment should have been carried out by civil servants rather than by outside personnel and that the outside contract with EAI entailed needlessly high expenses.

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[10] This history does not cover special demonstration programs Upward Bound had the responsibility of monitoring for the OEO research and demonstration office within the national program such as Newgate. This is a prison program for convicts who will be released shortly so that they can enroll in college. The first such program was at the Oregon State Prison. These demonstration programs were funded under section 207 (later 232) of the Economic Opportunity Act.

In addition, the EAI contract dated July 1, 1967 had been for $789,405, but due to supplemental agreements, Mrs. Green noted that "we find the total amount of the contract within a period of twenty days was increased from $789,405 to $1,398,940."

By way of explanation, OEO stated:

> The money referred to by Mrs. Green as supplemental to the contract awarded Educational Associates, Inc., was not a supplemental, but a series of subcontracts awarded Educational Associates, Inc., that would have been renewed at that time regardless of which organization was awarded the parent contract. The contract was let on a competitive bid basis...
> The total amount expended for Upward Bound in fiscal 1968 is $30 million, with little more than $1 million being spent on a contract for assistance in screening proposals, monitoring 283 projects, and providing continuing research information. The cost of the contract with EAI amounts to 3.2 percent of the total spent on Upward Bound.

When the legislation ordering the transfer was passed, it prohibited the use of a contract agency. On July 1, 1969 EAI closed its doors. Some of the staff went with Upward Bound to OE which administers Upward Bound without a contract agency.

A third charge, that Upward Bound was sending "dropouts abroad" at taxpayers' expense, grew out of the arrangements with the Experiment in International Living, which enabled 57 Upward Bound students to participate in a program which has students live with a family during part of a summer and travel for part of the time. These students were not "dropouts." All were high school graduates who, at least partly because of Upward Bound, were also definitely admitted to a college before they went abroad in June of 1968.

Dr. Billings had realized that the Experiment might be politically dangerous, but he clearly felt the educational merits of the program outweighed the possible political problems.

These poverty program students were to do what hundreds of more affluent students do every summer: get the experience and the education of living in and learning from a different culture. All the students were selected by their projects which paid the cost (an average of $1,100 per student) out of their existing budgets.

However, Mrs. Green believed the Experiment for Upward Bound students was an error because:

> I suspect that there would be thousands of high school students who would love to have a chance to be in Mexico or Brazil or Chile or some other country with all expenses paid and spending money in their pockets, but the youngsters from families of middle income cannot enjoy this experience; only their parents can pay higher taxes to send the disadvantaged student abroad for a year.[11]

As with the contract agency issue, OEO felt that nobody asked what those 57 students experienced and learned abroad or whether the money spent had been well spent. The issue was rather the propriety of spending Federal money in this manner or for this program at all.

In the same speech on "dropouts abroad" Mrs. Green spoke of her general concern for the type of student who was participating in Upward Bound:

> ...a number of Upward Bound enrollees are headed for a summer abroad. How did they qualify for this very special program? First, by being in great financial need; and second by not doing well in school and either being a dropout or a potential dropout. If a student is highly motivated, is working hard, and making satisfactory or good grades in school that student is not eligible for Upward Bound...

This argument seems to be most concerned with the type of students enrolled in the Upward Bound program. This reflects the feeling that some students who "should" qualify for the special advantages of the Upward Bound program were not eligible because they were achieving well, and thus were not a part of the Upward Bound target group of underachievers.

d. Arguments Against Transfer

In lobbying among Congressmen, Upward Bound and OEO officials used arguments of the following type:

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[11] The students went abroad for the summer, not for a year.

...The transfer would remove the hard-core poverty focus of Upward Bound which would encourage host colleges to resort to "creaming" in their recruitment of students.

...Neither the House nor the Senate bill provided for her intensive community involvement that is critical to the success of many Upward Bound programs. The CAP mandated participation would be destroyed.

...The transfer would place in jeopardy such current research and demonstration efforts initiated by Upward Bound as the various Indian projects, the prison programs, etc.

...The additional and different bureaucratic expectations of OE might well serve as the "last straw" for colleges and universities already overburdened by burgeoning enrollments, social tensions, and student unrest. [12]

7. Transfer Legislation and Transition

Even though it was clear that not all Congressmen agreed with either the specific charges or the general idea of the transfer, nonetheless the Congressional critics succeeded. In both the House and the Senate the vote in favor of the transfer was close but the transfer legislation was approved. The Senate version would have waited until 1970, while the House called for immediate transfer (1968). They compromised on the start of the next fiscal year. July 1, 1969 and the President signed the bill on October 19, 1968. That left a little more than eight months to arrange the orderly transfer of the administration of Upward Bound to the OE.

Dr. Billings had planned to hold a second Winter Conference of 50 project directors in November 1968 because the New Orleans Conference had recommended that such meetings be held annually. With the passage of the transfer legislation, there was an immediate need to communicate with the project directors so Dr. Billings called them all to a meeting in Dallas in December 1968.

Dr. Billings asked Mr. Bresnick to prepare a memo which would discuss in some detail the issues that might be raised by the transfer of Upward Bound to OE. This document, which became the basis for discussions with the National Advisory Committee and the Dallas Conference, stated insightfully those policy issues that Upward Bound wanted the OE to be aware of.

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[12] From a paper prepared by Upward Bound staff for distribution to Congressmen in July 1968.

a. Suggestions for the Future of Upward Bound

In summary the six most significant issues raised by Mr. Bresnick were:

1. Retention of the poverty program emphasis in Upward Bound. It is likely that the next administration's domestic programs will be more concerned with the problems of the families of the blue collar workers who feel that they have been forgotten than with the problems of families in poverty. Unquestionably their problems, particularly in assuring their children a college education, are real. However, the fact is still that the number of students who go to college from low-income families is much less than the number from any other strata in society.

2. Because OE is a traditional agency, there is a distinct danger that those responsible for recruiting will see the transfer as a green light to recruit students who would have made it to college without Upward Bound. What is needed is a clear statement, preferably in writing, that when the program is transferred it will continue to seek students with potential for college but who genuinely need the program.

3. The host institutions must continue to be kept aware of the services or programs available in their particular communities for the students and their families. He suggested that the checkpoint form, which made the academic institutions learn where the CAA in their area was located, should be retained as part of the OE application.

4. The Greenleigh study (January 1969) bears out the contention that Upward Bound has had little impact on the high schools. However, if, as the statistics indicate, Upward Bound has accomplished something with students whom others had given up on, then OE should try to work out mechanisms so that Upward Bound programs share what they have learned with high schools and colleges. It should be OE's task to make such a dialogue occur.

5. It would strengthen the program's administration if the regular staff who deal with the programs on a day-to-day basis were Federal employees. The current EAI Regional Staff should be transferred, if they wished, to OE since most of them are extremely competent.

6. The intention of Congress to administer Talent Search and Special Services for Disadvantaged Students along with Upward Bound under one roof should result in a single director of all three programs with a deputy and separate staffs for each. Such close coordination would be desirable.

b. The Dallas Conference and the Project Directors Steering Committee

While the Project Directors Steering Committee was an outgrowth of the Dallas Conference, its formation had been forecast in November when Dr. Billings invited a select group of project directors from across the country to come to Washington. Ostensibly they came together to plan the agenda of the forthcoming Dallas meeting, but actually the plan was "to form a union to save what we could of the program." Among those who did attend the Washington meeting was Mr. Larry Barclay, then project director of the Upward Bound program at Case Western Reserve University in Cleveland. Barclay was elected chairman of the Steering Committee in Dallas and held that position until the National Project Directors Meeting in October 1969 in Denver.

The Steering Committee, which had representatives from programs in each region of the country, was formally elected in Dallas. It presented a number of resolutions which included, in addition to reaffirmation of the New Orleans resolutions, a series of resolutions urging the OE to maintain the general policies of Upward Bound as they had been under OEO.

The Dallas meeting was attended by Mr. James Moore and Mr. Larry Koziarz, who were members of the OE Task Force to aid in the transition. Both felt they "were seen as the interlopers" and that the resolutions all seem to have been based on the assumption that trouble was coming and that because Upward Bound had been so good at OEO it would need protecting from the OE which represented the force of darkness.

In his speech in Dallas, Dr. Billings recounted the program's history and made it very plain that he hoped that directors would organize to protect the students' interests in Upward Bound. Mr. Moore was instructed by the project directors to take their resolutions back to the OE to make certain that they were aware that from that point forward the transition process was to be undertaken with the project directors themselves as active partners in the process. Some OE personnel took a dim view of the Steering Committee, or at least the manner in which it was created. Some at OE felt the Steering Committee was clearly an OEO creation, and because of that, the relationship was to be one of tension from the very beginning.

c. HEW Organization

The Steering Committee met with some regularity after Dallas with Upward Bound representatives and OE staff including Acting Commissioner Peter Muirhead, the new OE Commissioner, James Allen. and Acting Associate Commissioner for Higher Education, Preston Valien. The Steering

Committee was displeased with the reception to their requests on matters ranging from the 1970 Guidelines to the need to appoint both a new Upward Bound Director and a new director for the Division of Student Special Services (DSSS) of which Upward Bound was a part.

While the Steering Committee was a central visible element during the transition, its effectiveness was limited by the fact that it operated as an occasional outside force unaware of the day-to-day workings of the Washington staff of OE and OEO.

d. The OE Transition Task Force

The OE task force, formed to supervise creation of the new Division of Student Special Services, and the transition of the Upward Bound program from OEO to DSSS in the Bureau of Higher Education (BHE) of OE, had very few permanent members. When Dr. Muirhead left BHE, which was to be the eventual new home for Upward Bound, and Dr. Preston Valien was made head of the Bureau, he requested that a new division, to be called the Divison of Student Special Services, be created to house the three programs new to BHE: Upward Bound, Talent Search, and the new in-college support program called Special Services for Disadvantaged Students. The request to create a new division is a matter which had to be reviewed by HEW top-level staff. The request was made in January of 1969, but was not actually granted until May 1969, again a five-month period during which the basic administrative structure of Upward Bound at the OE was in limbo.

Almost all its staff including Mr. James Moore, Director of the Division of Student Financial Aid (DSFA), who served as the temporary Director of the DSSS prior to July 1, were borrowed from other jobs and the task force concerns were added to their existing work load. The two people who did most of the actual work in OE for Upward Bound were Mr. David Johnson and Mr. Larry Koziarz, both of whom had worked for Mr. Moore and were both to be on the staff of the new DSSS. Mr. Johnson had been chief of the Educational Opportunity Grants (EOG) branch at DSFA, where he had also been responsible for Talent Search which EOG had administered, and thus had a working knowledge of Upward Bound. Mr. Koziarz was selected for the key task of being the leg man who would be the physical go-between in the transition largely because most OE staff were unavailable and because Dr. Billings had been adamant that Mr. Moore assign only one person as the liaison. Mr. Koziarz had no previous familiarity with Upward Bound.

The remainder of the OE task force was made up of several part-time OE employees serving as OE Fellows for the year, who were assigned to prepare some of the material relating to the structure of the new DSSS. Since the task force was a part of the Bureau of Higher Education (BHE), it was ultimately responsible to Dr. Preston Valien, and his deputy, Mr. S. W. Herrell, who were to direct the new division, and thus were to oversee the manner in which it took shape, including the addition of Upward Bound. Dr. Valien and Mr. Herrell met several times with Upward Bound staff, with the Steering Committee, the Principals' Advisory Committee, and the National Advisory Committee.

e. The OEO Transition Task Force

For OEO, Dr. Billings designated Mr. Bresnick as a one-man task force. Various contract agency staff members spent time with Mr. Koziarz, but almost the entire liaison job, the mechanics of transition, was undertaken by Mr. Bresnick. Dr. Billings did meet occasionally with Mr. Bresnick and Mr. Harding, Acting Director of OEO, and members of the OEO General Counsel's office for planning. However, OEO as the "sending" agency did not mount nearly the effort that OE as the "receiving" agency did for the transfer and transition.

Insofar as there really was no OEO task force, there was really no joint task force coordinating the transition. There were only the harried crossed paths of Mr. Koziarz and Mr. Bresnick, and occasional meetings between administrators of OE and Upward Bound.

f. Staff Suggestions

In November, Dr. Billings met with OE high-level staff at the invitation of Commissioner Howe to explain Upward Bound. Dr. Billings was asked if he wanted to come to OE with Upward Bound. He was also asked his opinion about the transfer of programs like Upward Bound from administration by OE to administration locally by the state Departments of Education. Dr. Billings indicated his belief that such a transfer "from Washington to the states would kill the program." Dr. Billings felt this meeting and several others were very productive and that Commissioner Howe and, later, Dr. Muirhead, "wanted to serve as a buffer and not mangle the program."

Also in November, Dr. Billings was asked by Commissioner Howe to submit his recommendations for OE Upward Bound staff. Dr. Billings sent a list of about 35 persons, including a dozen or so of the contract agency people who had expressed an interest in making the transfer, stressing his belief that staff continuity was important.

Several people had suggested that OEO Upward Bound staff and contract agency staff should be phased into OE, with the phase-in starting April 15, 1969 and being completed by July 1. According to Dr. Billings, he was willing to phase over some Upward Bound jobs to OE before the transfer only if OE would hire EAI staff. The assurance was apparently not forthcoming, and cooperation gradually decreased during the transition period. Mr. Bresnick, who had accepted the offer to go to OE as Acting Director of the Upward Bound branch, carried most of the major responsibilities concerned with keeping the program in operation throughout the spring.

During this transition period, the approximately 300 Upward Bound programs were being refunded for 1969-1970. Almost all of these programs took a 7 to 13 percent cut in Federal dollars (because of an anticipated, and planned for, increase in Federal dollars that had been spent but not forthcoming the previous year.) Mr. Bresnick, because of his acknowledged expertise in fiscal matters, was given the responsibility of overseeing this refunding process. Thus it was May of 1969 before he could devote full time to staffing problems which had become complicated by the personality and, perhaps philosophical, differences described above.

8. The Nixon Administration

Of course the transition was further complicated by the election of a new Federal administration and the resultant changeover in the bureaucracy of the Federal government.

While many Federal agencies, because of their size, do not reflect such a changeover in any dramatic fashion, nonetheless almost every program and activity of the Federal government is influenced by a new administration. Meanwhile, everything slows down, pending new leadership, new directives, and reassessment of programs and budgets.

Harold Howe, in whom Dr. Billings had great confidence as U.S. Commissioner of Education, resigned in January of 1969. It took the new Secretary of HEW, Mr. Robert Finch, until May 1969 to locate the kind of replacement for Howe that he wished in the person of Dr. James E. Allen, who had been Superintendent of Education for the State of New York. Thus, during more than five of the eight months that Upward Bound was in transition to OE, the leading executive office in OE was filled on an interim basis by Dr. Peter Muirhead, head of the Bureau of Higher Education (BHE).

The slowed pace due to the confusion attendant with the change in administration had an obvious effect on staffing the Upward Bound program at OE. In February, according to one OE official, "We were promised ten open positions to begin to create the new Division. We never got any of those positions even though the transfer legislation specifically exempted Upward Bound staff from personnel ceilings." Mr. Bresnick spoke with Drs. Muirhead and Valien early in 1969 about staffing. The obvious place to start was to take all of the contract agency people who were willing to stay with the program. Although OE had indicated an interest as early as January in taking on EAI staff, it was not until June 23, one week before EAI closed down, that final arrangements were made for the transfer of the personnel. Part of the problem was getting these people onto the Federal payroll. EAI personnel feared they would not be able to maintain their salary levels as civil servants yet, in fact, most former EAI personnel received GS ratings which resulted in salary raises for them. There were, however, a number of EAI staff who might have wished to stay with the program but could not wait until the end of June to find out whether they would have a job with the OE. Mr. Bresnick points out that:

> I was lucky that as many staff from EAI did come, especially some key staff familiar with programs in each region of the country. Without that we would have been dead from the start.

The change in administrations also slowed down many other personnel decisions. Meeting with the Project Directors Steering Committee in May, Dr. Allen and Mr. Moore both noted that they believed that a DSSS Chief would be chosen shortly, and this belief was stated, with regularity, throughout 1969. On February 1, 1970 Dr. Leonard Spearman, a former Talent Search and Upward Bound project director, took office. The position of Director of the Upward Bound Branch was filled by Dr. Frances Halstrom, also a former project director, on the same date.

IV. SYNTHESIS OF PREVIOUS RESEARCH FINDINGS

It might be expected that substantial and meaningful research data would have been gathered as Upward Bound grew from 17 pilot programs in 1965 to almost 300 projects throughout the nation in 1969. In fact, very little intensive research was initiated during the period in which OEO sponsored Upward Bound compared, for instance, to Head Start, another former OEO national emphasis program, whose every facet has been investigated, often accompanied by national publicity in all the media.

The study staff is convinced that the absence of a large body of research does not result from any fear that it would reveal basic weaknesses and inadequacies in the program that would jeopardize its continuation. It would appear, rather, that the lack of research was due to policy decisions of both national directors and their staffs who, given the funding limitations for Upward Bound, felt strongly that program considerations needed every appropriated dollar. These policy decisions not only limited research on the national level but were written into the Guidelines which forbid research by local projects.

Most Upward Bound research was directly related to the need for evaluation of program efforts which were problematic or weak or to dramatize program efforts to the nation. However, as Chapter III indicates, the research that was performed was not given adequate publicity or distribution.

Several other local project factors which impinged on making research difficult are concerned with the availability and adequacy of a data base. Until late 1967, there existed no single, comprehensive data system for Upward Bound. Studies were initiated by Shea, Hunt and Hardt, and the Upward Bound contract agency, between the summer of 1965 and the fall of 1966. These studies present socioeconomic profiles of Upward Bound participants and track some of the early students longitudinally. The Upward Bound inhouse data system, operated out of the contract agency, did not become operative until it began collecting data in January of 1968.

The data system was not designed primarily for research purposes but, rather, to make information available for programmatic decisions in terms of program needs. The data were concerned largely with social and economic characteristics of participants, program attendance and separations, college enrollments, etc.

Upward Bound had been previously linked to the OEO CAP-MIS reporting apparatus. The effect of this was to focus development efforts on keying report formats to CAP-MIS requirements and conversely to defer development of more directly responsive reporting capability to serve the needs of Upward Bound managers and researchers. Early in the development of its own data system, Upward Bound management placed high priority on it as a device to relieve project staffs of the requirement to report to CAP-MIS.

A final qualification should be made with reference to the paucity of research on Upward Bound. Its rapid growth and small staff made it difficult for program administrators to focus adequately on research since their major concerns were with meeting project needs and problems and with monitoring project operations.

The synthesis of previous research findings which follows is based on a number of studies performed between 1966 and 1969. These capsule findings, together with conclusions about the nature and adequacy of specific research aspects, are represented under major topic areas which were addressed by the researchers.

Detailed abstracts of the studies are included in Appendix A of this report.

A. List of Research Studies

The following is a listing of the studies reviewed and the authors and/or agencies which are referred to in the synthesis.

	Author and/or Agency	Studies
a.	David E. Hunt and Robert H. Hardt, Syracuse Youth Development Center	Characterization of Upward Bound Studies: Summer 1966; Academic Year 1966-1967; Academic Year 1967-68. National and Regional Profile of 1967 Upward Bound Students; National Profile of 1967 Upward Bound Students: National Profile of 1967 Upward Bound Programs; National and Regional Profile of 1967 Upward Bound Programs.
b.	Paul Daniel Shea Primary Prevention Research and Development Center	Upward Bound, Early Progress, Problems and Promise in Educational Escape from Poverty, July 1968.

c.	John Gardenhire, Data Systems Office of Educational Associates, Inc.	Study of College Retention of 1965 and 1966 Upward Bound Bridge Students, 1968
d.	Bonnie R. Cohen and Ann H. Yonkers, Research Management Corporation	Evaluations of the War on Poverty, Education Programs, March 1969
e.	The Comptroller General of the United States, U.S. General Accounting Office (GAO)	Report to Congress; Review of Economic Opportunity Programs, March 1969
f.	H. Reed Saunders and Stephen S. Jones Financial Aid Services of American College Testing Program (ACTS)	A Study of Financial Need of Upward Bound Students: The 1968-1969 Bridge Class, 1968
g.	Harry Van Houten Greenleigh Associates, Inc.	Upward Bound, A Study of Impact on the Secondary Scool and the Community, January 1968
h.	Cybern Education, Inc.	Parental Involvement in Upward Bound, June 1969
i.	Sar A. Levitan Center for Manpower Policy Studies: George Washington University	Upward Bound: Fighting Poverty With A Sheepskin, 1968
j.	Joseph Froomkin Office of Program Planning and Evaluation, Office of Education, U.S. Department of Health, Education and Welfare	Students and Buildings: An Analysis of Selected Federal Programs for Higher Education, May 1968
k.	Francis A. Kornegay, Jr. Data System Office of Educational Associates, Inc.	College Enrollment of Former Upward Bound Students: A Profile and Summary

B. Research Findings

1. Attitudinal Changes

The studies by Hunt and Hardt and by Shea were the only ones which dealt with attitudinal changes in Upward Bound students over fixed periods of time. Hunt and Hardt indicate a positive change in attitude in almost all of the eight primary change measures such as: motivation for college, interpersonal flexibility, self-esteem, internal control, and future orientation, and retention of these changes over the period 1966 to 1968.

Shea's study compared presummer and postsummer questionnaire data on 1,268 Upward Bound participants,also revealing positive changes.

It would appear from these attitude tests, that the Upward Bound program does have a positive effect on students' attitudes and feelings about themselves and their motivational levels. This substantiates study staff findings gathered through group interviews with Upward Bound students at 22 host institutions in the summer of 1969.

2. Grade Point Averages and Test Scores

Hunt and Hardt report in all their data on GPAs that the Upward Bound participants were "slightly below average" in academic achievement. Two-thirds of the Upward Bound students tested were found to have an intelligence "equal to college demands," although the validity of the tests was questioned by the researchers.

The Research Management Corporation (RMC), Levitan, and the GAO reports are in general agreement with the above since they did not develop independent data of their own, but analyzed Hunt and Hardt and other available data. The GAO report noted that from 20 to 27 percent of the Upward Bound students in 1966 and 1967 attained B averages or better in their high school work prior to entering Upward Bound and that, according to their GPAs, Upward Bound students were not underachievers. However, comparing 3,000 Upward Bound high school graduates in 1967 with the national average of all high school students on the test developed by ACT, that 14 percent of the Upward Bound students fell in the upper middle and top quartiles compared with 49 percent for the national average.

Since the type of student participating in Upward Bound, more often than not, attends a poor school where academic preparation is depressingly meager, GPAs do not present a true evaluation of their academic ability. Marks are often not equated with performance; the student who sits quietly in the back of the room and does not disturb the teacher in a tense classroom may receive a B for his mute performance. Can one presume to compare a B average student in a black ghetto high school with a B average student in a white suburban competitive milieu when some students, who can neither read nor write beyond a fifth- or sixth-grade level, have been graduated from high schools? It is quite possible for a student with a B+ or A average in the poor school to be underachieving drastically.

3. Retention in High School

Although academic achievement in terms of grades has not been shown to improve with respect to participation in Upward Bound, both Hunt and Hardt and RMC report that high school dropout rates of participants have decreased markedly. The Upward Bound dropout rate was 5 percent compared to 35 percent for the general population of low-income students and 29 percent for older siblings of Upward Bound students. This would tend to confirm reports indicating a strong increase in motivation.

4. Social Characteristics of Upward Bound Students

Most data with respect to social characteristics of Upward Bound students have been reported in Hunt and Hardt's Characterization and National Profile reports. The profiles reveal that Upward Bound participants are approximately 50 percent black with a sizeable representation of other racial and ethnic minorities: Indians, Mexican-Americans, Puerto Ricans, and Orientals. Students are about equally divided between male and female. The families of Upward Bound Students are distinctly larger and less likely to be intact than families of the national average and their incomes averaged only about $3,341 per annum for 1966.

Levitan indicates that some of the projects have screened out potential failures and selected instead students with good grades who are likely to go to college without Upward Bound intervention. This may be true, but it cannot be used as a generalization for the entire national Upward Bound program. It is also possible that more project directors select high-risk students with poor grades than those who seek "winners." The possible lack of meaning of high grades has already been discussed. The Guidelines state: "Students selected for Upward Bound shall be those who have potential for success in a two- or four-year college, but whose present level of achievement and/or motivation would seem to preclude their acceptance in such an institution."[1]

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[1] Guidelines, Upward Bound 1969-1970, page 6.

The General Accounting Office (GAO) study, focusing on student selection based on income criteria, reports that, in a sample of 1,536 Upward Bound students in 12 projects, about 18 percent were considered ineligible according to income criteria and Upward Bound Guidelines. The data are disputable because no means test or other check on income is required; the report by the student on income is accepted. It could very well be that an even larger number of Upward Bound students are ineligible according to the income criteria for Upward Bound since students immediately react to, and are aware of, the meaning of questions on income. Thus, they would tend to deflate their family incomes in order to be accepted into the program.

The entire question of poverty criteria has been debated by project directors and the administration of Upward Bound. In large urban areas a student's nonwelfare family may have a smaller income than a welfare family and yet he may be declared ineligible because his family's income exceeds OEO income criteria. Welfare payments in some large urban areas are often greater than OEO poverty criteria. While any student whose family source of income is welfare is automatically financially eligible for Upward Bound, any student whose family income is not from welfare must meet the poverty criteria. Yet, some project directors in these urban areas have reported difficulty in finding students who clearly meet the OEO income levels and argue that adjustments should be made for high-income, high-cost-of-living, areas.

5. College Admissions

Hunt and Hardt, in their 1966-1967 academic year study, point out that 92 percent of the Upward Bound students in their sample of 21 schools indicated a desire to continue their education past high school. This is 20 percent higher than national statistics. RMC, EAI data, and the GAO report all cite statistics to indicate a higher rate of college enrollment among Upward Bound students than among the national student population, the low-income population, or older siblings.

Levitan notes that, even if the successful college-going rates of 80 percent for 1967 Upward Bound graduates are accepted, the type of student enrolled varies little in GPA from other students in their high schools. Information is not complete as to how academically disadvantaged Upward Bound students really are although the ACT study reports these students appreciably below average.

It is fairly obvious that the Upward Bound program has been impressively successful in getting graduates enrolled in college and universities. Despite various disclaimers that some of the students were good students to begin with, it is a fact that they generally attended poorer high schools, undoubtedly resulting in their being educationally disadvantaged which did not make them overly attractive to the majority of colleges. In comparison with their older siblings their enrollment rate was almost three times as great. On balance,past studies indicate that the Upward Bound program has been assisting in enrolling students in colleges at unprecedented rates for the type of student it recruits.

6. College Retention or Persistence

Many colleges in recent years have liberalized their admissions policies. Some state institutions have an "open door" policy for all students graduating from high school; but the open door is also a revolving door and, after a year, most of the academically disadvantaged are swept out. Early observers of Upward Bound speculated about the chances of Upward Bound students surviving in college.

Shea's data on college persistence show that 60 percent of the 1965 Upward Bound students who enrolled in college had persisted through five semesters, and 67 percent of the 1966 enrollees had stayed in college three semesters. These figures are comparable with, or higher than, the national college persistence rates.

RMC shows high persistence rates for a large sample of the 1965 and 1966 Upward Bound classes enrolled in two- and four-year colleges and states that these figures are good predictors for graduation rates, compatible with the national average of 50 percent of those who started college.

Froomkin in Students and Buildings, reporting on college retention, cites statistics on the 1965 class to indicate only 50 percent remaining into the sophomore year and predicts only a small group of these will graduate. The data for these statistics were based on a preliminary study which yielded incomplete information and therefore was misleading. Many studies which track students into their junior year at college report higher rates of retention than those accorded by Froomkin to students in their sophomore year. Levitan is not surprised at the high retention rates since 46 percent of all Upward Bound students are enrolled in host-sponsored schools which, he believes, are generally committed to the admission of Upward Bound students. In addition, he states that many Upward Bound students are enrolled in community or junior colleges, teachers colleges, or similar institutions whose admission barriers are low and whose standards are less rigorous. He also points out that 80 percent of black Upward Bound students are enrolled in black colleges. There is only token acceptance of Upward Bound students by prestige colleges. These data are essentially true although the 80 percent figure is questionable, and over a period of time there has been considerable change in the pattern of the schools in which Upward Bound students have been enrolled. For example, black students are now not so exclusively enrolled in black colleges as Kornegay reported in his 1967 data, when black host institutions in the South enrolled the greatest numbers of black Upward Bound graduates. Data in 1969 indicate that the percentage of black Upward Bound students attending predominantly black colleges has declined from 64 percent to 29 percent.

Levitan's retention argument, even if it is correct in its implication that Upward Bound students are persisting in college because they attend low-standard schools and that their education will thus be inferior, must be viewed in the light of the overall goals and dimensions of the Upward Bound program. Upward Bound was not conceived as a program for poor but highly motivated and academically gifted young people to get them into prestige colleges. It was, and is, a poverty program for poor youths who are academically disadvantaged and who would not ordinarily make it to any college at all. It was, and is, an attempt to break the poverty syndrome via the higher education route. A student who receives a degree, not withstanding the quality of the college, will undoubtedly be less likely to be poor. It is also felt that the impact of this will be felt by his younger siblings and be reflected in his own children's increased motivation and opportunity.

With respect to black students attending black colleges, especially in the South, given the temper of the times and the desire for black identity and some forms of separatism, it is likely that black students will continue, in some instances, to select black colleges even when a choice is available.

It would appear, therefore, given the goals of Upward Bound, that the emphasis should be on preparing Upward Bound students to persist in college so that large numbers of them may graduate, and not on getting larger numbers into prestige colleges from which only a few will graduate. This is not to say that standards should not be upgraded and that those Upward Bound students who wish to go should not have the chance to attend prestige schools.

7. College Problems of Upward Bound Students

Shea's study underscores the financial and academic concerns which create particular problems for Upward Bound students in college. It appears that financial aid packages are inadequate and impel many to work who can ill afford to do so in the light of the time needed for academic study and improvement. The absence of close personal counseling and assistance further aggravates these problems.

Many students are confused about their programs and courses of study, often because of the choice of school they have made. This observation is supported by the ACT study showing that students are often forced, out of financial considerations, to select institutions which offer them the best financial aid package, or the only college which offers them financial aid. The selection is often not suited to the personality or the educational goals of the student.

The conclusion drawn from both the Shea and ACT studies is that, in addition to providing more generous and well-designed financial aid formulas, high-quality guidance features must be inserted into the Upward Bound program and into those colleges which Upward Bound students attend.

8. Financial Need of Upward Bound Students in College

The ACT study of the financial need of Upward Bound students is unique. We know of no other study which looks in such detail at the financial needs of Upward Bound college students. ACT reports on a 10 percent sample of the Upward Bound college-going universe for the 1968-1969 school year and, based on a weighted average college budget for the projected universe of students, arrives at a total financial need of $18,844,800 and a projected shortage of $1,707,810 for all Upward Bound students.

This study discusses financial aid packages, pointing out that Upward Bound students are sometimes favored because of intense intervention by Upward Bound project directors, and indicates that Upward Bound students' needs are met more adequately by Economic Opportunity Grants funding than by other types of Federal aid. However, the make-up of an ideal financial aid package needs further research. The report argues that financial aid for the Upward Bound student must also be augmented by a fuller commitment by the funding college in the areas of academic and counseling assistance through the first year of study.

Similar to the Froomkin study which arrives at the direct tie between student aid and Upward Bound program expansion, ACT sees the very survival and growth of Upward Bound linked with requisite student aid funding. These findings should be kept in mind in light of the larger-than-35-percent cut in EOG monies available to freshmen in 1969-1970.

A large number of incisive recommendations are made in the ACT study, including the coordination of efforts of all Federal agencies concerned with programs for disadvantaged students; a longer-range pattern of funding; analysis, research, and study of funding patterns; and the provision of opportunity for OEO program directors and college financial aid officers to communicate and exchange ideas more effectively.

The ACT study, although somewhat dated, needs wider distribution in the financial aid community not only for its relevance to the Upward Bound program, but for its significance for all disadvantaged students who are college bound.

9. Impact of Upward Bound in Secondary Schools

Levitan briefly discusses the lack of impact Upward Bound has had on secondary schools, indicating that it derives from lack of direct involvement by school officials, and the minimal role of the schools themselves in the Upward Bound program. He finds it difficult to visualize the program affecting the secondary schools.

The Greenleigh study also states that the program has had only a minimal effect on the high schools. This was caused by lack of communication between project and schools, the small number of students from each school in the program and, most important, the perception traditional educators have of the Upward Bound program and the OEO agency which, they feel, are antithetical to the principles and practices of established education.

Other information from EAI consultants, site-visit reports, and from the summer visits, points to small yet positive effects on some Upward Bound feeder high schools. The presence of Upward Bound clubs in these schools has given the program greater visibility. Teachers and principals in these schools are better informed and more alert to the program. Some Upward Bound staff members who are also teachers in high schools have introduced some of the techniques used in the Upward Bound project into their own teaching. But in terms of decided impact on the structure of curricula and on teaching approaches, the Upward Bound program has not been successful.

10. Impact on Host Institutions

Levitan voices doubts about Upward Bound's ability to influence the participating institutions to adopt admission standards more relevant to disadvantaged youth and to develop new curricula and teaching methods, because of the small size of the program and its part-time nature.

It is undoubtedly true that the program has had little impact on host institutions, especially large ones where the program is merely a speck in the sea of their total involvement. However, in small schools encouraging changes have been observed and reported, such as: greater acceptance of Upward Bound students on campus, complete use of facilities by Upward Bound students, waiver of admissions standards for Upward Bound students recommended by their project directors, and increased participation by host faculty in Upward Bound summer programs.

It is also evident that a number of sweeping changes are occurring on campuses across the nation, notably in the direction of active recruitment of students similar to those in the Upward Bound program. Several programs have been started to facilitate the retention of these students in college through remedial and other means. Upward Bound has undoubtedly exerted some influence in precipitating this movement, which in turn has led to the creation of a new Federal program at the U. S. Office of Education called Special Services for Disadvantaged Students, which has a mandate to provide supportive programs.

11. Parental Involvement

The Parental Involvement study by Cybern Education, Inc. was made primarily to develop an empirically based operational definition of parental involvement in the Upward Bound program and to develop testable hypotheses about the effects of parental involvement. The study involved visits to six programs, two each of those considered low, medium, and high with respect to parental involvement. The findings on parental involvement contributed to the development of the operational definition. Parents in high- and medium-involvement projects seemed to be involved both out of concern for specific project features and for their own child's progress, whereas parents in low-involvement projects were seen as motivated in their involvement only by concern for their own child's progress. A significant positive relationship was found to exist between the degree of parental involvement and student performance in the project although this relationship was not seen as causative.

V. STUDENT CHARACTERISTICS AND INDICATORS OF PROGRAM SUCCESS

This chapter concerns itself with the most significant characteristics of the Upward Bound students and program from 1965 to 1969. In most cases data are provided both for the universe and for the sample selected for this study. The chapter is divided into three sections: student characteristics; college enrollment and retention characteristics; and conclusions.

The study sample consists of students from the 22 selected Upward Bound programs which the field analysts visited during the summer of 1969. The universe encompasses the students in approximately 300 projects.

It should be noted that the data for 1965, and to a lesser extent for 1966, are from the time prior to the systematic collection and analysis of statistics relating to Upward Bound. In many cases information on these early years is either unavailable or has only limited usefulness. Thus data for the period 1967 and 1968 and, when available, 1969, are emphasized as are data concerning the universe of programs; sample data were gathered solely for purposes of validating the representativeness of the sample.

In the presentation of data, the universe and the sample are compared and analyzed especially with respect to such significant factors as sex, race, achievement test scores, grade point averages, college enrollment and retention, and project attrition.

Several caveats should be expressed about the data and the limitations in working with them. First, there are no definitive baseline data which are uniform for the various characteristics examined. For example, although nearly 100 percent of the data on race and sex are available for the program year by year, there is available much less data on poverty criteria because a few projects never reported poverty criteria on their participants for particular years. This absence of data is even more pronounced for such items as PSAT and SAT scores and GPAs.

A second problem occurs with the data on college enrollment and college retention. Enrollments in colleges are reported to the data system by the project directors and checked at various intervals with the enrolling colleges by the data system office. Discrepancies have occurred between these initial reports from the field and the subsequent check and, in a limited number of cases, the number of students actually enrolled has not been satisfactorily determined. This is true also for retention data which are dependent upon close tracking of the individual student through his years at college and which is often both time consuming and difficult to obtain. For example, it has not yet been determined exactly how many students who were enrolled in and were graduated from two-year colleges went on to study at four-year colleges.

Also, since the current data system did not become operational until the spring of 1968, data from 1965 and 1966 had to be obtained from such studies as the Shea, Hunt and Hardt, and Gardenhire reports. When college enrollment and retention for 1965 and 1966 is examined, it is based, therefore, on data developed by Gardenhire in a special study. Any analysis of the sex and race characteristics of participants for 1966, must be based on data analyzed by contract agency staff and on the questionnaires distributed by Hunt and Hardt in their characterization studies.

Finally, it must be pointed out that in several tables the numbers of students in the sample are so small that a slight change in the figures has the effect of producing percent changes that appear to be more significant than they are.

In the following tables, and in the analysis of the data, those areas where data were unavailable or available only in part are noted and the different data origins are indicated.

A. Student Characteristics

The data on student characteristics offer a general picture of the type of student who has enrolled in the Upward Bound programs.

1. Sex

As is evident in Table 3, the Upward Bound universe has consistently contained a slightly greater proportion of female students from 1966 through 1969. The student population during these years has been composed of between 50 and 52 percent females, and between 48 and 50 percent males. This may be slightly at variance with the Guidelines, which suggest that, while males and females should be equally enrolled, a particular effort should be made to enroll males from "groups which show a pattern of more female enrollment and retention in educational institutions."

Table 3 also reflects increasing total enrollment between 1966 and 1968; in 1969, total enrollment decreased as a result of budget cuts which affected nearly every Upward Bound program. Like the universe, the study sample shows a slight predominance of female students, about a

1 to 3 percent difference, except for 1968 where they are absolutely balanced, and reflects an increase in enrollment between 1966 and 1968 and a decrease in 1969.

Table 3

Sex of Students in Upward Bound Universe
and in Study Sample by Year (in percents)

	Universe			Study Sample		
Year	Total Number	Male	Female	Total Number	Male	Female
1966	(18,698)[a]	48.6	51.4	(1,812)	48.2	51.8
1967	(22,803)	49.8	50.2	(1,902)	49.5	50.5
1968	(24,721)	49.4	50.6	(1,746)	50.0	50.0
1969	(23,202)	48.9	51.1	(1,491)	48.3	51.7

[a] 1966 data analyzed by Dr. Robert Strickler of the contract agency. Data obtained from a self-administered questionnaire distributed by the Syracuse Youth Development Study team in the summer of 1966.

2. Race

Table 4 illustrates the fact that Upward Bound programs contained a decreasing proportion of white students and an increasing proportion of black students during the years 1966 through 1969. The decrease in whites was about 5 percent; the increase in blacks, about 3 percent.

The number of American Indian students in Upward Bound programs almost doubled between 1966 (763) and 1969 (1,384); in large measure this is a result of the special interest in that group by the National Director, Thomas A. Billings. The category "other" represents students from Alaska and Guam. Oriental students were not listed separately in 1966 so no data are available for that year on this group.

The study sample also shows a generally decreasing proportion of white students and an increasing proportion of black students for the period 1966 through 1969. The number of American Indian students in the sample increased for these years, although percentages listed do not reflect this since all programs showed general increases in numbers of students enrolled. Other minority groups in the sample showed relatively constant increases.

Table 4

Race of Students in Upward Bound Universe and in Study Sample by Year (in percents)

	Universe							Study Sample						
Year	Total Number	White	Black	Amer. Indian	Spanish Surname	Oriental	Other	Total Number	White	Black	Amer. Indian	Spanish Surname	Oriental	Other
1966	(18,306)[a]	33.0	51.9	4.1	7.3	-	3.4	(1,492)	31.7	49.9	6.9	7.5	.06	3.8
1967	(22,293)	31.7	51.5	4.2	9.8	.9	1.9	(1,690)	25.7	60.3	3.9	6.7	1.5	1.5
1968	(24,408)	29.4	54.2	4.8	9.2	.7	1.5	(1,831)	26.2	58.7	4.0	8.7	1.3	.8
1969	(22,968)	28.0	54.4	6.02	9.4	.7	1.3	(1,800)	24.5	59.1	4.5	8.8	1.3	.7

[a] 1966 data analyzed by Dr. Robert Strickler of the contract agency. Data obtained from a self-administered questionnaire distributed by the Syracuse Youth Development Study team in summer of 1966.

Table 5

Upward Bound Enrollees in Universe and in Study Sample Above and Below Poverty Criteria (in percents)

	Universe								Sample							
		Below Poverty Criteria[a]								Below Poverty Criteria[a]						
Year Entered	Number	List A	Welfare	Public Housing	List B	Mis-man-agement	Above Poverty Criteria	Total Percent	Number	List A	Welfare	Public Housing	List B	Mis-man-agement	Above Poverty Criteria	Total Percent
1966	(6,048)	61.2	13.7	2.7	10.0	N.A.	12.4	100.0	(399)	56.5	15.5	2.9	10.0	N.A.	14.8	100.0
1967	(12,374)	59.2	14.6	3.6	10.0	N.A.	12.6	100.0	(725)	50.6	17.2	6.3	10.0	N.A.	15.9	100.0
1968	(21,377)	57.7	14.6	4.4	10.0	7.0	6.3	100.0	(1,434)	50.6	13.5	4.4	10.0	7.0	14.5	100.0
1969	(22,165)	54.1	15.9	4.9	10.0	7.0	8.1	100.0	(1,519)	46.0	17.5	5.0	10.0	7.0	14.5	100.0

[a] Based on 1969 poverty criteria, Appendix B. pp. 4-5.

3. Poverty Criteria Characteristics

The poverty criteria are a series of income limits, established by family size and place of residence, which determine eligibility to participate in OEO programs. The criteria, which form List A in the Guidelines, are based upon standards initially established by the Department of Agriculture and the Social Security Administration.

a. Within Poverty Criteria

Table 5 presents percentages of students enrolled during the years 1966 through 1969, whose family income was within the poverty criteria as established on List A in the Guidelines,[1] or who met the requirements because the family was on welfare or lived in federally supported public housing. For the universe, the table shows an increase from 13.7 percent in 1966 to 15.9 percent in 1969 in the proportion of students whose families met the poverty criteria due to receiving welfare payments and from 2.5 percent to 4.9 percent due to living in federally supported housing. Proportions of students in the sample qualifying due to welfare increased from 15.5 percent in 1966 to 17.5 percent in 1969; the percentage of those qualifying under federally supported housing increased from 2.9 percent in 1966 to 5.0 percent in 1969. For the universe, the table shows slightly decreasing proportions of students who qualified under List A, from 61.2 percent in 1966 to 54.1 percent in 1969. For the sample the decrease is from 56.8 percent in 1966 to 46.0 percent in 1969. These decreases may be caused by general inflationary pressures which may make the income requirements so unrealistic that fewer students can meet them.

b. Above Poverty Criteria

Enrollees considered above the poverty criteria are those who come from families with incomes which are higher than the amounts specified in the Guidelines. The data system included in this category two groups of enrollees who were, strictly speaking, not above the criteria, but who are above List A. The first group contains up to 10 percent of the enrollees who are specifically permitted to come from families with slightly higher incomes than those on List A. This group makes up students enrolled under List B. The second group comes from families with incomes above either List A or List B, but where there is evidence that the family "mismanages" income in such a way that the enrollee is, in fact, living in poverty.

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[1] A detailed explanation of the poverty criteria appears in Appendix B of this report reprinted from the 1969-1970 Guidelines.

In an effort to obtain data in this area, given the problems associated with students enrolled under List B or the "mismanagement" provision, the following adjustments have been made:

1) For 1968 and 1969, 7 percent of the total number was subtracted from the total in the "Above Criteria" category. This 7 percent represented the estimated percent of "mismanaged " cases for those two years. Similar data are not available for 1966 and 1967, so no subtraction was made for those years.

2) Ten percent was subtracted in the "Above Criteria" category, for each year, 1966 through 1969, from the final percentage obtained. This 10 percent represents the maximum percentage of students who may (and probably do) enter Upward Bound under List B.

The proportion of students in the universe who were above the poverty criteria after adjustments were made, ranged from 12.4 percent in 1966 to 8.1 percent in 1969. After similar adjustments were made in the study sample, the proportion of students above the poverty criteria was relatively stable, from 14.8 percent in 1966 to 14.5 percent in 1969, which does not reflect the Upward Bound universe as closely as might be desired. In 1969, there were approximately 5 percent more cases above the poverty criteria than was evident in the Upward Bound universe; an 8 percent discrepancy is evident in 1968, and about 3 percent in 1967 and 1966.

4. Grade Point Average at Entry to Program

Table 6 indicates that the mean grade point averages (GPAs) for Upward Bound students in both the universe and the study sample rose between 1967 and 1968, from 2.27 to 2.38 in the universe and from 2.34 to 2.52 in the sample. This change is perhaps due to the change in recruiting policy, and is further indicated by the continued rise in GPAs for the universe in 1969 to 2.92. There is no apparent reason for the fact that the mean GPA of the sample showed a drop in 1969.

The increase between 1967 and 1968 is a reflection of the increase in students in the 3.00 to 4.00 range, from 22.4 percent to 26.9 percent in the universe and from 26.4 percent to 29.9 percent in the study sample. At the same time, the percent in the 1.00-1.99 range dropped from 27.6 percent to 19.3 percent in the universe and from 24.9 to 17.6 percent in the study sample. The 2.00-2.99 range, in which the majority of the GPAs fall, remained relatively constant.

Table 6

Grade Point Average at Entry for Upward Bound Universe and Study Sample by Year (in percents)

	Universe						Study Sample					
Year	Total Number	0.00-0.99	1.00-1.99	2.00-2.99	3.00-4.00	Mean GPA	Total Number	0.00-0.99	1.00-1.99	2.00-2.99	3.00-4.00	Mean GPA
1966[a]	(13,438)	3.3	25.1	44.7	26.9	2.46	(1,091)	4.4	26.9	41.7	27.0	2.49
1967	(4,285)	1.4	27.6	48.6	22.4	2.27	(289)	3.1	24.9	45.6	26.4	2.34
1968	(6,706)	2.1	19.3	51.7	26.9	2.38	(534)	1.4	17.6	51.1	29.9	2.52
1969	(5,449)	1.9	21.9	51.2	25.0	2.92	(480)	2.7	25.8	47.9	23.6	2.36

[a] 1966 data were taken from data analyzed by Dr. Robert Strickler, since these data provided 3 times as many GPAs as were available from the Applied Data Research data bank records.

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5. High School Curriculum of Enrollees

Table 7 shows that, while Upward Bound is in principle for underachievers, the largest group of its enrollees had already been enrolled in a college preparatory curriculum at the point of entry into Upward Bound. The second largest group of enrollees had been in general curriculum programs which do not have many of the science and language requirements of the college preparatory curriculum, but are not vocationally oriented.

Less than 20 percent of all Upward Bound students entered the program from a remedial, vocational, or commercial course of study.

From 9 to 12 percent of the enrollees in the universe from 1966 to 1969 changed from another curriculum type into a college preparatory one while enrolled in Upward Bound. This average figure of 10.2 percent for the years 1966 to 1969 probably represents the intervention of the Upward Bound program in helping the enrollee prepare himself for college.

The sample data are similar for most years except 1967, which presents a 25 percent figure changing to a college preparatory curriculum. No explanation for this significant variation is available.

6. Measures of Academic Potential

The Preliminary Scholastic Aptitude Test (PSAT) is a shorter version of the Scholastic Aptitude Test (SAT) and is designed for use in secondary school guidance programs. In form and content, the PSAT and the SAT are parallel: the verbal sections of both tests measure the ability to read with

Table 7

Type of High School Curriculum Upward Bound Students Enrolled in, With Changes to College Preparatory Curriculum for Sample and Universe (in percents)

Year Entered Curriculum	Universe 1966	Universe 1967	Universe 1968	Universe 1969	Sample 1966	Sample 1967	Sample 1968	Sample 1969
College preparatory	52.1	45.1	47.3	46.3	47.0	43.1	47.4	48.9
General	31.5	35.5	39.4	40.0	32.6	33.7	38.8	35.4
Vocational	6.2	6.1	4.2	4.0	9.9	7.6	5.2	5.3
Commercial	5.8	6.4	5.5	4.4	6.1	9.9	6.6	6.5
Remedial	0.2	0.1	0.2	0.3	0.6	0.2	0.2	0.6
Not decided	2.8	5.4	3.0	4.7	1.7	5.0	1.7	2.7
Other	1.4	1.4	0.4	0.3	2.1	0.5	0.1	0.6
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Number	(11,512)	(10,726)	(11,289)	(9,786)	(937)	(696)	(795)	(686)
Number changing to college preparatory	(572)	(525)	(739)	(464)	(65)	(99)	(44)	(33)
Percent changing to college preparatory	10.4	8.9	12.4	8.8	13.1	25.0	10.5	9.4

skill and to understand and use words correctly; the mathematical sections measure the ability to reason with numbers and other mathematical symbols. Both tests are considered equally effective in measuring scholastic ability and predicting college performance of middle class high school students.

It should be stressed that the data that are available on the subject are incomplete: only about 2,000 scores were available for the Upward Bound universe and only several hundred for the sample. The national SAT and PSAT data are based on a national sample of more than 15,000 scores.

Table 8 shows that PSAT scores for a sample of the universe of Upward Bound students show means of 36.2 and 34.4 on the mathematics and verbal parts of the examination, and for the study sample the respective scores were 36.1 and 33.8. These correspond closely to the national averages of 37.5 and 35.5[2/] for all juniors in high school, but are expectedly lower than the 46.0 and 40.5 for all high school juniors who later entered college.

The universe SAT means of 393.3 and 371.1 and the sample scores of 394.5 and 366.2 are only slightly lower than the national averages of 402.0 and 391.5, for all seniors. They are, of course, lower than the 485 and 453 for all seniors who later entered college.

The comparison of Upward Bound students with the groups who later entered college is particularly meaningful since the great majority of Upward Bound students eventually enroll in college. For both examinations, Upward Bound students scored significantly lower than the college-going population. These differences ranged from about 6 to 10 points on the PSATs and from 80 to 90 points on the SATs. On the American College Testing (ACT) examination, which is also used as a predictor of college success, the mean score of the Upward Bound students who took this test was 14.4, and of a sample of all college freshmen was 20.0, a difference of 5.6.

In all probability, the test score means for Upward Bound students who later enroll in college would still fall far below the test score means for a national sample of college-going students. In other words, the group of college-going students from the national sample is probably more select (higher scores) than all Upward Bound college-going students. If these tests are accurate indices of mathematical and verbal ability, it must be assumed that Upward Bound students are deficient in these areas.

[2/] College Board Score Reports, College Entrance Examination Board, New York, 1969.

Table 8

Measures of Academic Potential for the Upward Bound Universe[a] and the Study Sample Compared with National Sample of All High School Juniors and of all Juniors Who Later Entered College

	PSAT				SAT			
	Upward Bound Universe	Study Sample	National Sample of All High School Juniors	National Sample of All High School Juniors Who Later Entered College	Upward Bound Universe	Study Sample	National Sample of High School Seniors	National Sample of High School Seniors Who Later Entered College
Mathematics	36.2	36.1	37.5	46.0	393.3	394.5	402.0	485.0
Verbal	34.4	33.8	35.5	40.5	371.1	366.2	391.5	453.0

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[a] No dates are given here, as these scores collected from 1967 to 1969 for Upward Bound enrollees have been combined.

There are several possible explanations for the high college-going rate of Upward Bound students as compared with the national college-going rate. First, project directors may be using their influence on college admission officers to accept Upward Bound students. Second, college admission policies for Upward Bound students may be eased as they are for disadvantaged students in general. Third, Upward Bound students may be attending schools with less stringent admission policies. Table 16, page 93 contains further data relative to this question.

7. Family Size

Table 9 illustrates the size of the family from which the average Upward Bound student comes compared with the U.S. mean family size. The mean family size of 6.17 for Upward Bound enrollees' families is 68.5 percent larger than the mean family size in the United States.

Table 9

Mean Family Size of Upward Bound Students, by Year Entered

Year Entered	Students	Total Members of Family	Mean Family Size	U.S. Mean Family Size [a/]
Total	44,880	277,337	6.17	3.66
1965	76	393	5.17	3.66
1966	11,557	68,397	5.91	3.66
1967	10,507	63,321	6.02	3.66
1968	12,301	79,179	6.43	3.66
1969	10,439	66,047	6.32	3.66

[a/] U.S. Mean Family Size, according to the U.S. Bureau of the Census, in 1960, was 3.67, in 1968 (the only other data available) was 3.66, therefore 3.66 is assumed as constant for the period 1965-1969.

8. Gross Income of Enrollees' Families

Table 10, which shows the distribution of enrollees' families by gross family income, indicates that, from 1965 to 1969, 90 percent had incomes of less than $6,000. In view of the fact that Table 9 demonstrated that they had an average family size of about six persons, it becomes clear that most of these students come from extremely poor families, whether or not they meet the poverty criteria.

Table 10

Distribution of Upward Bound Enrollees by Gross Family Income, by Income Category and Year (in percents)

Income Category	Calendar Year 1965[a/]	1966	1967	1968	1969
$ 0 - $2,999	42.5	38.0	39.0	35.8	33.7
$ 3,000 - $5,999	47.5	54.8	53.6	55.6	56.6
$ 6,000 - $7,499	7.5	5.6	5.7	6.6	7.5
$ 7,500 - $8,999	-	1.1	1.2	1.3	1.5
$ 9,000 or more	2.5	0.5	0.5	0.7	0.7

[a/] Income information for 1965 is incomplete.

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9. College and Bridge Program Enrollment

Tables 11 and 12 provide data regarding enrollment in college and in Bridge programs for the sample and the universe from 1967 to 1969.

Columns 2, 3, and 4 show basic college entrance data. The number of Upward Bound high school graduates enrolling in college increased steadily from 62.0 percent in 1967 to 70.4 percent in 1969.

Column 5 shows the percentage of students who attended college and who attended the Bridge program. There is a marked and steady decrease from 1967 to 1969 of almost 18 percent. Conversely, column 6 shows an 18 percent increase in the students who enroll in college without the extra academic and precollege study that is the central feature of most Bridge programs. In 1969 over 30 percent of the students who went to college had not attended the bridge program the previous summer. This probably reflects the fact that the rising cost of college and the inadequacy of college aid has forced more and more students to seek summer employment to provide funds for their freshman year in college. In addition, some colleges encourage freshmen who are from the disadvantaged population to begin their studies in the summer, before the start of the regular academic year, sometimes in a special program run by the college just for this group.

Column 7 shows that about 75 percent of all the students who enroll in the Bridge program do go to college. This means that the Bridge program does serve as a place where three-fourths of its enrollees do get experiences, both academic and social, of what their freshman year is to bring.

Table 11

College and Bridge Program Enrollment by Year for Universe

Year	Number of High School Graduates in Upward Bound	Percent of Upward Bound High School Graduates Enrolling in College	Number in College	Percent in College Who Enrolled in Bridge Program	Percent in College Who Did Not Enroll in Bridge Program	Percent in Bridge Program in College	Percent Not in Bridge Program Enrolled in College
1967	5,717	62.0	3,547	87.8	12.2	75.2	27.4
1968	9,415	68.7	[illegible]	75.5	24.5	79.1	48.7
1969	6,967	70.4	4,908	69.3	30.7	75.96	54.01

Table 12

College and Bridge Program Enrollment by Year for Sample

Year	Number of High School Graduates in Upward Bound	Percent of Upward Bound High School Graduates Enrolling in College	Number in College	Percent in College Who Enrolled in Bridge Program	Percent in College Who Did Not Enroll in Bridge Program	Percent in Bridge Program in College	Percent Not in Bridge Program Enrolled in College
1967	432	72.2	312	85.9	14.1	73.8	63.7
1968	795	70.7	562	80.6	19.4	83.5	40.7
1969	566	75.8	429	81.1	18.9	84.2	58.3

Column 8 shows the steady increase in the percentage of students who do not attend the Bridge program and who do go to college. This percentage doubled, from 27 to 54 percent. Thus more than half of the students who do attend college do not now enroll in the Bridge program. These students, especially, are the ones who may sorely miss the aid of the Bridge program.

The group of students who do not go to college, 100 percent minus Column 3, includes about 15 or 20 percent who enroll in other postsecondary courses. Thus, only about 10 percent of all Upward Bound high school graduates do not further their education after high school.

It should also be noted that national figures for 1968 indicate that 16.6 percent of the college-going students enrolled in 2-year colleges. In 1969, the figure was 15.5 percent, or, slightly more than 20 percent of students going to college.

10. Place of Residence

The data in Table 13 suggest that Upward Bound has primarily served urban youngsters, in about the same proportion from 1966 to 1969. Dr. Billings, in 1968 and 1969, tried to encourage the funding of more rural students, but increased that group only 1.1 percent.

Table 13

Place of Residence for Upward Bound
Universe and Study Sample, by
Year Entered (in percents)

	Universe				Sample			
Year Entered	Total Number	Urban	Rural	Institutional	Total Number	Urban	Rural	Institutional
1966	(6,199)	75.0	24.7	0.3	409	77.5	19.3	3.2
1967	(6,778)	68.6	27.8	3.6	291	67.7	24.1	8.2
1968	(11,095)	68.2	28.3	3.5	742	57.1	39.8	3.1
1969	(9,750)	67.6	28.9	3.5	611	65.4	28.4	6.2

Rather than an urban decrease giving way to a rural increase in 1967, what took place was an unexplained 3.3 percent increase in the students whose residence was institutional (orphanage, penal institution, etc.) and the universe has had consistently approximately that proportion of institutional residents ever since. The sample data are equally unusual in this respect, showing two years (1967 and 1969) with larger institutional populations than would be expected. However, this can be explained since at least 1 of the 22 sample programs placed high emphasis on recruiting such students.

11. Nonbridge Student Separations

Table 14 gives a breakdown of reasons why students in Upward Bound who have not yet graduated from high school (nonbridge students) leave the program. The original questionnaire (OE Form 1197), from which these data were obtained, listed 10 categories for the area titled "Circumstances of Leaving." An eleventh category was added later to include students who had been enrolled in projects that had closed.

Upward Bound Data System (UBDS) Category	Category Change	Study Category
1. Graduated from high school: completed Bridge	Drop	1. Involuntary dismissal
2. Graduated from high school: Bridge not completed	Drop	2. Personal and family problems
3. Dropped out of high school	1	3. Financial problems
4. Left for personal or family reasons	2	4. Health problems or death
5. Financial problems	3	5. Family moved
6. Health problems	4	
7. Deceased	4	
8. Disappeared	5	
9. Project director's decision to drop from program	1	
10. Family moved from area	5	
11. Project closed	1	

Since only nonbridge students were being examined, items 1 and 2 in the UBDS categories, referring to high school graduates who had left the program, were not considered. All of the remaining categories have been telescoped into five as shown above, and on Table 13, for the following reasons:

... **Categories 8, "Disappeared," and 10, "Family moved from area," were combined because it was assumed that students who could not be located had moved out of the community.**

... Since "Deceased" and "Health problems" both relate to physical injury or disease, categories 6 and 7 were combined.

... Categories 3, 9, and 11 are all forms of involuntary dismissal. If a student has "Dropped out of high school," dismissal from Upward Bound is not mandatory. Therefore, dismissal was presumably the result of a decision made by the project director. Students who were in projects that closed, category 11, were usually assigned to other projects unless distances were too great. If they were not reassigned, their inability to enroll in Upward Bound was considered involuntary.

The data on the universe show a close correspondence in overall attrition rates for the 1968-1969 and 1967-1968 academic years. These figures are 15.9 percent and 12.6 percent, respectively.

A close look at the reasons for separation shows that the 3 percent increase in the 1968-1969 academic year can be attributed largely to "personal and family problems" which went from 6.8 to 9.5 percent. The remaining increase apparently resulted from financial problems.

The original data upon which this is based, which give attrition rate by months, as well as by year, show that more than 60 percent of the students who drop out each year leave the program in May and June. The attrition rate is about twice as high in June as in May. All of the categories except "Health problems or death," which obviously does not follow any seasonal pattern, show significant increases in these last two months of the academic year.

Rather than academic year dropouts, these students could be called pre-summer dropouts. Since most students who decide to drop out of school, do so at the end of spring term, it is reasonable to expect that if they are in Upward Bound they will not attend the summer program. In addition, the project director's decision to dismiss students may actually be a decision not to allow the student to enter the summer program after watching his poor performance or attitude during the follow-up period.

Table 14

Nonbridge Student Separations in the Universe and in the Study Sample
by School Session

School Session		Type of Separations	Universe				Study Sample			
			Percent	Total Separations	Total Number	Separations as Percent of Total	Percent	Total Separations	Total Number	Separations as Percent of Total
Summer 1967	1.	Involuntary dismissal	1.0	515	17,086	3.0	0.5	27	1,690	1.6
	2.	Personal and family problems	1.5				0.9			
	3.	Financial problems	0.04				-			
	4.	Health problems or death	0.1				-			
	5.	Family moved	0.4				0.2			
Academic Year 1967-1968	1.	Involuntary dismissal	3.9	2,272	18,025	12.6	2.8	98	1,409	7.0
	2.	Personal and family problems	6.8				2.8			
	3.	Financial problems	0.6				0.2			
	4.	Health problems or death	0.2				0.1			
	5.	Family moved	1.1				0.9			
Summer 1968	1.	Involuntary dismissal	2.7	946	15,306	6.1	1.8	58	1,831	3.2
	2.	Personal and family problems	2.9				1.0			
	3.	Financial problems	0.1				-			
	4.	Health problems or death	0.2				0.1			
	5.	Family moved	0.5				0.3			
Academic Year 1968-1969	1.	Involuntary dismissal	3.7	2,788	17,470	15.9	3.0	222	1,338	16.6
	2.	Personal and family problems	9.5				11.4			
	3.	Financial problems	1.1				0.7			
	4.	Health problems or death	0.3				0.1			
	5.	Family moved	1.4				1.3			
Summer 1969	1.	Involuntary dismissal	1.2	655	16,235	4.0	1.2	59	1,800	3.3
	2.	Personal and family problems	2.1				1.8			
	3.	Financial problems	0.1				-			
	4.	Health problems or death	0.1				0.1			
	5.	Family moved	0.5				0.3			

"Personal or family problems" and "Financial problems" would not prevent a student from attending the follow-up session, but might prevent him from attending the summer programs, which are usually away from home and which occur at a time when the student has an opportunity to enhance his personal income. It is already known that many students do not attend the Bridge program in order to earn money for college.

Finally, families are more likely to move at the end of the academic year, thus allowing the child to finish his high school year but preventing him from continuing in Upward Bound.

Summer attrition rates have varied from 3 to 6 percent between 1967 and 1969.

The majority of summer dropouts were due to "Involuntary dismissal" and "Personal and family problems."

The attrition rates for the study sample correspond fairly closely to the rates for the Upward Bound universe.

The sample shows only one significant deviation: for the academic year 1968-1969, separations for "Personal and family problems" were inordinately high. The large percentage of students, 11.4, who were separated for "Personal and family problems" in this year is accounted for by four or five projects in the sample which had disproportionately high separations in this category for the period. Closer examination revealed that the greatest number of these separations occurred among students who had been in the Upward Bound program from a few weeks to less than a year.

B. College Enrollment and Retention

1. Duration in Upward Bound and College Attendance

In this section data are presented which give some of the characteristics of the Upward Bound students who have enrolled in college since 1965. Table 15 shows that college enrollment increases steadily as a function of time spent in the program, with the exception of the 0-3 to 4-12 month category which probably reflects 0-3 students who enroll for a Bridge summer only. The actual numbers for this category are quite small relative to the rest of the population; 536 for 1967, 330 for 1968, and 345 for 1969 in the universe, and less than 20 for each year in the sample. The practice of recruiting high school graduates as new enrollees for Upward Bound, as was done for most of the pilot programs in 1965, may well result in high college-going rates, but probably involves taking a student who is not an underachiever.

These underachievers do not reach the retention percentage of the 0-3 month group until they have been enrolled in the program 25-36 months. Somewhere in the 13-24 or 25-36 month time period, the overall current college-going rate of about 70 percent for Upward Bound students is reached. Further distinctions, such as dividing the period into four-month intervals, will be necessary before any further conclusions can be drawn.

Table 15

Duration in Upward Bound Related to College Attendance for Universe and Study Sample, by Year (in percents)

Number of Months in Program	Enrolled in College					
	Universe			Sample		
	1967	1968	1969	1967	1968	1969
Total Number	(4,648)	(9,473)	(7,676)	(428)	(716)	(593)
0-3	62.1	81.5	84.9	36.8	100.0	73.3
4-12	57.9	47.0	59.7	68.7	36.5	58.0
13-24	76.1	64.7	58.2	74.2	80.3	72.5
25-36	100.0	80.3	77.5	N.A.	-	86.3
37-48	N.A.	N.A.	80.0	N.A.	N.A.	94.7
49 plus	N.A.	N.A.	100.0	N.A.	N.A.	N.A.

N.A. Not applicable.

2. Type of College Admissions Achieved

Table 16 describes the various routes that project directors report Upward Bound college enrollees used to gain admission to college. For the years 1967 to 1969, although they may have been identified as being from Upward Bound, between 64 and 74 percent of these were considered to have met the basic requirements and were admitted through the regular admissions process. While no data on the requirements themselves are available, it can be assumed that there were broad variations among institutions.

It should also be noted that between 7.8 and 11.9 percent of the enrollees have gone to institutions where there is an open door policy which generally requires only a high school diploma for admission. At one time, most state universities operated under such policies, but the crush of applicants in the 1960's all but ended the practice in most four-year schools. However, it might well be that many of the 17 to 20 percent of Upward Bound college entrants who enrolled in two-year colleges enrolled in those that retained the open door policy. In any event, open door policies for admission may be considered a subset of being admitted through regular admissions procedures since the successful applicant has, by definition, met the normal admissions requirements if he has a high school diploma. Thus, 75 to 90 percent of all Upward Bound college entrants fall into the group which does not need, or get, special arrangements to gain admission and only 10 to 25 percent need to be "brokered" for admission. This must be considered in the light of the fact that, from 1966 to 1969, Upward Bound has taken at least 40 percent of its students from among those who were already enrolled in the college preparatory curriculum.

In any event, shifting from percentages to numbers, it appears that, in both 1968 and 1969, more than 1,000 students each year were admitted under some modified admissions arrangements. It is probable that those more than 2,000 students would not have been admitted without special considerations of one sort or another. Usually the Upward Bound program served as the agent for the student needing special consideration. This is an indication that a number of projects are working in the areas of creating at least that amount of institutional change which granted admission to those 2,000 students.

Table 16

Type of College Admission Gained
by Upward Bound Students, by Year

Type of Admission	1967		1968		1969	
	Number	Percent	Number	Percent	Number	Percent
Total number	2,365		5,945		4,889	
Regular admissions requirements met	1,532	64.7	4,444	74.7	3,476	71.0
Open door admissions policy	283	11.9	469	7.8	396	8.2
Admissions requirements modified for student	550	23.4	1,032	17.5	1,017	20.8

3. College Retention

Table 17 presents retention rates which are currently available for the universe and the sample of Upward Bound graduates in college. In the universe, it appears that retention rates of Upward Bound graduates entering college are fairly high for 1965 and 1966. For example, of the

1965 entrants, about 77 percent finished their junior year in college. Of the 1966 entrants, 82 percent finished their sophomore year, and 52 percent finished their junior year.

By subtraction, it appears that dropout rates average about 10 percent in the freshman year, and between 18 and 37 percent in the sophomore year. A random sample of 400 students from the 1967 class taken in October 1969 shows that 55 percent of them had entered their junior year (percentage not shown on table). This compares favorably with the 52 percent completion rate cited for the 1966 class.

The 1965 class, with a 77 percent retention in the third year, appears to be a particularly strong class. The 1967 class, with 63 percent remaining in the second year, has a lower rate as compared to the 82 percent for 1966 students.

Such retention rates generally compare favorably with the national retention rate which is about 50 percent as a gross dropout rate at the end of four years. Although graduation data are not available in the Upward Bound universe, four-year retention rates can be estimated from the figures shown in the table. Since dropout rates are usually much lower in the junior and senior years, it can be expected that Upward Bound college enrollees will graduate somewhere near the 50 percent mentioned as the total gross national figure.

The retention rates for the study sample compare more than favorably to those cited for the universe. In the sample, retention was 96 percent for 1966 college entrants completing their junior year; among 1967 entrants, retention was 91 percent at the end of the sophomore year. By subtraction, dropout rates appear to be about 2 percent at the end of the first year, and about 10 percent at the end of the second year. Although data are not yet available for the last two years, except for 1966 students, high retention rates may be expected.

As is usually the case, the small base figures for the study sample tend to produce less meaningful percentages. In all respects, the data on college retention for both the universe and the study sample are very scant and preclude any detailed analysis. This is a data area which requires improvement, as it is used as a central measure of the ultimate success of the program.

4. Race of College-Going Students

Table 18 gives the racial make-up of the total college-going classes for 1966 to 1969 for the sample and the universe. These data show little

Table 17

College Retention for Universe and Study Sample (in percents)

	Universe					Study Sample				
Year	Total College Enrollment	Completed Freshman Year	Completed Sophomore Year	Completed Junior Year	Completed Senior Year	Total College Enrollment	Completed Freshman Year	Completed Sophomore Year	Completed Junior Year	Completed Senior Year
1965 a/	(1,028)	N.A.	N.A.	76.9	c/	No projects in the sample were funded during this year				
1966 a/	(1,047)	N.A.	82.4	52.0	-	(59)	N.A.	N.A.	96.6	-
1967	(3,593)	92.0	63.0	-	-	(314) b/	98.7	91.0	-	-
1968	(6,510)	c/	-	-	-	(561)	98.9	-	-	-
1969	(5,056)	-	-	-	-	(441)	-	-	-	-

a/ 1965 and 1966 data were obtained from the Gardenhire report.

b/ Gardenhire report contained data on only four sample schools of the 22 in the total sample.

c/ The data system was required, by circumstances attendant on the transition of the program from OEO to OE, to reduce its level of activity in the spring of 1969. For this reason college retention data on 1968 college entrants and 1965 college seniors are presently unavailable. A special survey was made to get data on the 1968 sample.

N.A. Not applicable.

Table 18

College Enrollees by Race and Year for Sample and Universe (in percents)

Race	Universe 1966	Universe 1967	Universe 1968	Universe 1969	Sample 1966	Sample 1967	Sample 1968	Sample 1969
Total Number	(601)	(3,237)	(6,535)	(4,882)	(20)	(275)	(557)	(431)
White	6.5	25.4	28.7	25.5	25.0	14.5	25.6	25.0
Black	89.3	56.2	56.7	57.8	65.0	73.0	60.6	63.8
American Indian	0.3	2.3	2.8	4.6	-	1.0	4.3	3.2
Spanish surname	0.5	10.7	9.6	10.3	-	8.7	6.3	6.4
Oriental	0.8	1.7	1.0	0.9	10.0	1.4	2.3	1.1
Other	2.6	3.7	1.2	0.9	-	1.4	-	0.5

change after 1966 when the Bridgeclass was small and almost wholly black as was the college-going group. What is of specific interest is the almost total absence of change from 1967 to 1969 with the exception of the American Indians whose percentage of the freshman class doubled in the 1967-1969 period from 2.3 to 4.6 percent.

It is also of interest to compare the racial make-up of program entrants, as shown in Table 4, with that of those students who finish the program and enroll in college. In 1969, for example, there is less than a 3 percent difference for any race in the racial make-upof the program and that of each race's representation in the 1969 freshman class of Upward Bound graduates. The consistent decrease in white Upward Bound entrants is not matched by a consistent decrease in the percentage of whites in the freshman class.

5. Sex of College Enrollees

Table 19 reflects proportions of males and females enrolled in college for the universe and study sample. Rates of college enrollment in the universe reflect a slightly larger percentage of male college entrants in both years for which data were available. Although in 1968 the universe contained 47.1 percent males and 52.9 percent females, the percentages for college enrollment were 71.3 percent for males and 66.9 percent for females. Similar proportions are evident in 1967.

The study sample is similar to the universe in that rates of college enrollment reflect a larger percentage of male college entrants. For example, in 1968, the sample contains 47.9 percent males and 52.1 females graduating from high school. The percentage of college enrollment is 72.9 for males and 68.2 for females.

Thus, in both the sample and the universe there are about 5 percent more female than male high school graduates. But this figure is nearly reversed in terms of college entry, with 3 to 5 percent more male college enrollees in the universe and 4 to 9 percent in the sample.

Table 19

Sex of Upward Bound High School Graduates
and Sex of Upward Bound College Entrants
for Universe and Sample (in percents)

				Enrolled in College		
Year of Graduation	Number of High School Graduates	Sex			Sex	
		Male	Female	Number	Male	Female
Universe						
1967	(4,557)	46.7	53.3	(3,213)	72.0	69.2
1968	(9,331)	47.1	52.9	(6,435)	71.3	66.9
Sample						
1967	(434)	47.2	52.8	(314)	77.0	68.1
1968	(796)	47.9	52.1	(561)	72.9	68.2

6. Race of High School Graduates, and Percentage Enrolling in College

Table 20 shows high school graduates by race and the percent of each racial group enrolling in college for both universe and sample. Proportions of both black and white students in the universe enrolling in college remained almost constant between 1967 and 1968--a 3.0 percent decrease for black students and a 1.3 percent increase for white students.

Greater increases took place among American Indians, with the percentage of their Upward Bound college entrants rising almost 35 percent, and of others (Eskimos, students on Guam, etc.) which increased almost 22 percent.

While only about 60 percent of the black high school graduates enrolled in college, the figures were significantly higher, about 73 percent, for white Upward Bound high school graduates. Whether this disparity reflects financial need, admissions patterns, or a combination of other facts is not known at this time.

Table 20

High School Graduates by Race and Percent Enrolling in College for Universe and Sample

	Race											
	Black		White		Spanish Surname		American Indian		Oriental		Other	
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Universe												
1967	1,077	63.6	2,195	73.2	578	71.4	133	48.8	50	92.0	215	40.9
1968	2,970	60.6	4,830	74.5	795	80.0	218	82.5	83	81.9	234	62.8
Sample												
1967	264	76.1	69	56.5	28	85.7	10	20.0	4	100.0	59	74.5
1968	338	69.5	231	61.0	60	70.0	45	53.3	15	86.6	7	85.7

NOTE: Numbers shown are high school graduates; graduates entering college are shown as a percentage of the number. N fulfills three conditions: (1) student graduated high school that year, (2) race data are available for this student, and (3) whether or not this student enrolled in college is known. Therefore total N for each year does not add to all students who graduated from high school, as race or college enrollment data are incomplete on some of these files.

7. College Enrollment by Grade Point Average

Table 21 indicates both the number of high school graduates in each GPA range at the time of program entry for 1967 to 1969, as well as the percentage of that number who enrolled in college. For example, in 1967, 8 students (of 436 graduates) had a GPA at entry to Upward Bound of less than 0.99. Of those 8, 25 percent, or 2 students enrolled in college, and 75 percent, or 6, did not. It is important to keep in mind that GPAs are given at the time of entry into the program, not at graduation, since the latter figure is not available from current Upward Bound records but it is probable, and is supported by the Hunt and Hardt longitudinal GPA study, that the overall GPA of Upward Bound enrollees does not change a great deal.

Table 21 indicates that Upward Bound enrollees with high GPAs (3.00-4.00) have better than an 80 percent chance of being enrolled in a college. The crucial GPA range, from which the largest number of the students come (see Table 7) is 2.00-2.99. The college-going rate in this group is between 60 and 70 percent, or about the same as the college-going rate for all Upward Bound high school graduates according to Table 19.

While the percentages in the lower GPA ranges seem high, 39.5 percent in 1968 and 57.4 percent in 1969 in the 0.00-0.99 range, it must be emphasized that the total numbers involved are only 43 and 47 respectively and, thus, the number of enrollees at the lowest GPA level range from a high of 26 in 1969 to a low of 2 in 1967.

It is also worth noting that, although the total numbers are smaller in the 1.00-1.99 range than those in the 2.00-2.99 range, the percentage of enrollees in 1968 and 1969 is about 50. It is probable that these students, assuming no large GPA change upward by the time of graduation, are those shown in Table 16 to have been admitted to college either by an open door institution or are among the about 20 percent of Upward Bound college entrants for whom there was some modification of admission requirements.

Data for the sample appear surprisingly small but it must be noted that even a large percentage of a small total number will yield a small number. Thus the 100 percent college-going rate in the lowest GPA range is for total numbers of 2, 2, and 8! The sample does show larger college entrance percentages in the 1.00-1.99 range.

Table 21

GPA at Entry for High School Graduates and College Enrollees for Universe and Sample, by Year

High School Graduation Year	Number of High School Graduates	Number of High School Graduates at each Level of Entering Grade Point Average				Percent Enrolled in College at each Level of Grade Point Average			
		0.00-0.90	1.00-1.99	2.00-2.99	3.00-4.00	0.00-0.99	1.00-1.99	2.00-2.99	3.00-4.00
Universe									
1967	436	8	70	204	154	25.0	21.4	60.3	86.7
1968	4,160	43	837	2,031	1,209	39.5	50.2	68.7	84.4
1969	3,483	47	610	1,796	1,030	57.4	57.0	69.8	81.5
Sample									
1967	33	2	9	11	11	100.0	66.7	72.7	100.0
1968	254	2	61	125	66	100.0	62.3	70.4	75.8
1969	289	8	51	155	75	100.0	62.7	77.4	85.3

8. Enrollment in Host Institutions

Tables 22 and 23 show enrollment at the host institution of the Upward Bound program in which the student had been enrolled by race, year, and OE Area [3] for the study sample and the universe. There seem to be no overall trends for all Upward Bound programs.

For example, enrollment in host institutions for white students holds fairly constant within each geographical area with the exception of the Northeastern Area where there has been a steady decline. Yet in the other sections of the country, though the percentages have been steady within an area over time, there is a wide variation among areas. In the Southwestern Area enrollment was 62 percent with an increase in 1969; for the Great Lakes the percentage of white students enrolling in their own host institution was around 40 percent, and dropped to 31 percent in 1969.

For black students, the Northeastern area, which is where the largest single number of programs are located, shows a steady decline. The North Central Area where the number of blacks students is smallest, has shown a steady increase, more than doubling from 1967 (19 percent) to 1969 (45 percent).

The other four geographical areas have held relatively constant in the pattern of enrollment of blacks to their own host institutions. But again, there is wide interarea variation, with the Southeast staying around 38 percent and the Southwest around 50 percent.

Looking at the totals, without regard to race, for each area year by year, it is apparent that the only section where there appears to be an overall decline is the Northeastern Area, where the total percentage has dropped about 50 percent each year, from 71 percent in 1966 to only 11 percent in 1969. The North Central Area has seen growth in host enrollments, especially in 1969. The other areas have remained fairly constant, again with wide regional differences, from about 50 percent in the west to about 35 percent in the Great Lakes area.

A study of the decrease in black enrollment in black schools indicates that black students attended black colleges in far smaller percentages year by year.

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[3] Area I (Northeastern); Area II (Great Lakes); Area III (Southeastern); Area IV (Southwestern); Area V (North Central); Area VI (Western).

Table 22

Number of Upward Bound Students in Universe
Enrolling in all Colleges and Percent Enrolling in Host Colleges
by OE Area, Race, and Year Entered College

	AREA I (Northeastern)								AREA II (Great Lakes)							
	1966		1967		1968		1969		1966		1967		1968		1969	
Race	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	87	71.2	384	33.5	990	27.6	951	11.3	11	100.0	678	27.5	1,382	33.5	898	36.7
White	10	70.0	100	31.0	337	29.6	224	13.1	6	100.0	162	39.5	336	39.5	236	31.3
Black	70	70.0	192	37.5	515	27.1	606	22.7	a/	N.A.	467	20.5	953	30.8	598	38.6
American Indian	-	N.A.	2	100.0	10	50.0	12	25.0	-	N.A.	4	-	7	42.8	3	33.3
Spanish Surname	1	-	59	10.1	80	20.0	94	9.5	-	N.A.	33	30.3	65	40.0	48	45.8
Oriental	1	100.0	10	30.0	25	20.0	6	16.6	-	N.A.	2	-	10	40.0	10	10.0
Other	5	100.0	21	71.4	23	34.7	9	33.3	-	N.A.	10	40.0	11	27.2	3	33.3
	AREA III (Southeastern)								AREA IV (Southwestern)							
Total	107	6.5	834	35.9	1,866	43.9	1,155	40.8	212	37.2	549	51.3	1,039	53.9	729	54.3
White	1	-	170	62.5	509	54.4	277	50.9	-	N.A.	96	62.5	167	62.2	100	73.0
Black	106	6.6	630	30.7	1,327	39.7	853	37.7	210	37.6	296	50.3	482	46.8	354	50.0
American Indian	-	N.A.	-	N.A.	7	28.5	15	13.3	-	N.A.	24	33.3	36	41.6	80	27.5
Spanish Surname	-	N.A.	17	29.4	26	53.8	9	77.7	1	-	127	46.4	346	57.8	191	63.3
Oriental	-	N.A.	1	100.0	-	N.A.	1	-	-	N.A.	-	N.A.	2	50.0	1	-
Other	-	N.A.	7	14.2	-	N.A.	-	N.A.	1	-	6	100	6	66.6	3	100

N.A. Not applicable

a/ Data on 165 black students not reported; therefore, number and percent not computed.

Table 22 (continued)

Number of Upward Bound Students in Universe
Enrolling in all Colleges and Percent Enrolling in Host Colleges
by OE Area, Race, and Year Entered College

	AREA V (North Central)								AREA VI (Western)							
	1966		1967		1968		1969		1966		1967		1968		1969	
Race	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	112	2.6	337	39.4	729	38.9	570	52.2	72	68.0	455	49.6	545	44.9	579	54.0
White	3	33.3	153	47.0	385	46.4	235	52.3	18	55.5	124	52.4	135	58.5	165	47.2
Black	107	1.8	110	19.0	207	27.0	208	45.2	39	61.5	126	38.0	223	38.1	203	45.8
American Indian	-	N.A.	27	37.0	69	33.3	63	34.9	2	100	19	63.1	55	36.3	54	48.1
Spanish Surname	1	-	43	65.1	47	51.0	58	55.2	-	N.A.	70	31.4	65	21.5	105	40.0
Oriental	-	N.A.	1	-	1	100	1	-	4	75.0	44	70.4	31	64.5	25	64.0
Other	1	-	3	66.6	4	25.0	5	80.0	10	100	74	68.9	36	75.0	27	40.7

N.A. Not applicable.

Table 23

Number of Upward Bound Students in Sample Enrolling in all Colleges and Percent Enrolling in Host Colleges by OE Area, Race, and Year Entered College

	AREA I (Northeastern)								AREA II (Great Lakes)							
	1966		1967		1968		1969		1966		1967		1968		1969	
Race	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	-	N.A.	4	25.0	66	16.6	49	18.3	8	100.0	74	37.0	77	41.5	106	54.7
White	-	N.A.	3	33.3	50	30.3	26	23.1	4	100.0	11	54.5	13	61.5	18	61.1
Black	-	N.A.	1	-	13	30.8	21	14.3	4	100.0	55	21.8	59	37.3	80	52.5
American Indian	-	N.A.	-	N.A.	2	-	-	N.A.	-	N.A.	1	-	1	100.0	1	100.0
Spanish Surname	-	N.A.	-	N.A.	-	N.A.	1	-	-	N.A.	7	28.6	33.3	33.0	5	60.0
Oriental	-	N.A.	-	N.A.	1	-	1	-	-	N.A.	-	N.A.	1	-	-	N.A.
Other	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	2	50.0
	AREA III (Southeastern)								AREA IV (Southwestern)							
Total	-	N.A.	102	50.9	145	40.6	92	31.5	-	N.A.	54	59.2	131	38.1	64	48.4
White	-	N.A.	20	65.0	17	35.3	21	23.8	-	N.A.	4	75.0	28	25.0	9	77.8
Black	-	N.A.	79	46.8	127	40.9	71	33.8	-	N.A.	40	47.5	78	32.1	44	45.5
American Indian	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	1	100.0	8	37.5	3	100.0
Spanish Surname	-	N.A.	2	100.0	1	100.0	-	N.A.	-	N.A.	9	100.0	17	88.2	8	12.5
Oriental	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.
Other	-	N.A.	1	-	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.

N.A. Not applicable.

Table 23 (continued)

Number of Upward Bound Students in Sample Enrolling in all Colleges and Percent Enrolling in Host Colleges by OE Area, Race, and Year Entered College

	AREA V (North Central)								AREA VI (Western)							
	1966		1967		1968		1969		1966		1967		1968		1969	
Race	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	-	N.A.	1	100.0	68	47.0	50	66.0	12	100.0	40	47.5	70	45.7	70	52.8
White	-	N.A.	-	N.A.	30	53.3	22	77.3	1	100.0	2	50.0	5	20.0	11	45.5
Black	-	N.A.	1	100.0	19	47.4	15	73.3	9	100.0	25	52.0	42	50.0	44	45.5
American Indian	-	N.A.	-	N.A.	13	30.8	10	40.0	-	N.A.	1	-	-	N.A.	-	N.A.
Spanish Surname	-	N.A.	-	N.A.	3	-	3	33.3	-	N.A.	5	60.0	12	58.3	11	72.7
Oriental	-	N.A.	-	N.A.	-	N.A.	-	N.A.	2	100.0	4	50.0	11	81.8	4	100.0
Other	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	3	-	-	N.A.	-	N.A.

N.A. Not applicable.

While Sol Levitan in "Fighting Poverty with a Sheepskin" was correct for 1967, when he wrote his article noting that blacks went primarily to black colleges, this situation has steadily declined to less than half the 1967 figures in 1969.

Table 24

Black Upward Bound College Enrollees Enrolling in Predominately Black Institutions of Higher Education, by Year (in percents)

Year	Black Upward Bound Enrollees in Black Colleges
1967	64.0
1968	36.8
1969	29.2

C. Conclusions

While this chapter presents more data about various aspects of the Upward Bound program than are contained any other study, it is apparent that there are many areas either not mentioned or not dealt with in sufficient detail. The college retention data, for example, needs more development and analysis, and the types of research which this would require are discussed elsewhere in this report as are suggestions for future research into areas not covered at all in this chapter.

The single overall impression made by the mass of data in this chapter is the basic stability of almost all measures over time. While certain trends are noticeable, there are no large-scale changes.[4/] This may be due to the fact that, for almost all measures, data are available for only two or three years. Over this relatively short period of time, it is not surprising that significant changes do not occur.

This absence of change may make the data seem bland, but at the same time, it would seem to attest to the consistency of purpose and goal which characterize the program.

[4/] The exception to this statement appears in Table 24, where we find far fewer black students enrolling in black colleges from 1967-1969.

VI. FIELD VISITS: ANALYSIS AND FINDINGS

A. Introduction

To obtain supplementary background information and to observe the operation of current Upward Bound projects, Greenleigh Associates undertook to visit a sample of 22 programs in the summer of 1969. The sample was selected by the OEO project manager in consultation with Greenleigh Associates project staff members from nominations made by OEO Upward Bound and EAI staff. The selection included approximately equal numbers from each OEO region, some rural projects, and a few focused on ethnic minorities. Programs which had been visited often during the past year were eliminated.

Of the 22 projects in the sample, 14 were picked from a list nominated as "typical" of the majority of all Upward Bound projects and 8 were selected as "atypical." The "atypical" projects were not uniform by any criteria. Six were nominated as presumably possessing strong innovative programs or curricula; three were nominated as "troubled," that is, evidencing internal disruption due to racial or political friction on or off campus or to project-host or director-staff dissension, one of which was designated as qualitatively poor. Among the troubled programs, one was included which was also considered innovative.

There exists in Upward Bound a number of projects considered "atypical," but not for reasons ascribed to the ones characterized above. For example, there are 20 projects out of the approximately 300 in Upward Bound which have nonresidential summer programs. Students come to the college campus every day during the summer but return to their homes at the end of the day. The reasons for the nonresidential aspect are varied, but in the main they result from lack of facilities, particularly lack of dormitory space. In several instances, the host colleges, fearing racial tensions, considered it politic not to keep Upward Bound students on campus over night.

Thirteen of the Upward Bound projects are hosted by college preparatory schools. These programs are conducted in the same fashion as those hosted by colleges and universities and include a residential summer and an academic year program.

The Independent Schools Talent Search Program (ISTSP) is funded by Upward Bound as a single unit, but it consists of 35 to 40 separate private college preparatory schools which have sponsored about 263 participants to the present time. Currently, the projects are supporting 162 participants.

It is indicated that the ISTSP contract will run out at the end of fiscal 1970. These projects, although funded mainly by Upward Bound, also receive additional funding from other sources. The programs are different from those normally conducted by the other Upward Bound hosts. They are full-year residential programs, providing a total environment for the participants. They are focused intensively on college preparation and include small classes, concentration on academic preparation and excellence, and the remediation of weaknesses in reading, writing, and speech. Needless to say, the programs are expensive, running about $5,000 per student in comparison with the less than $1,500 per student usually expended in the regular type of Upward Bound program.

There are approximately 11 projects whose sponsors are local community action agencies. The agencies contract with nearby colleges or universities to provide the program, but the funding responsibility resides with the agencies. It is assumed that, at the end of spring 1970, the community action agencies will no longer be permitted to sponsor projects since the Upward Bound program has been transferred to the Office of Education.

None of the above types of projects were nominated for the sample since they were not in the main stream of projects represented in the universe. Taken as a whole, the projects in the sample offer a mix that approximates the universe very closely in that there are a large number of "typical" projects and a small number of "atypical" ones with some extreme elements. The data tables on significant characteristics of the participants in the sample, who number approximately 3,300, are presented in the preceding chapter. There they are compared with the universe and analyzed. On balance, the sample, with only minor deviations, is fairly representative of the universe.

Field analysts visited each of the 22 projects for a period of at least five days. About half of the projects were also observed by the Greenleigh study supervisors. Utilizing questionnaires developed by the study staff, in-depth interviews were conducted with the following at each project:

... the project director, and assistant directors, including past directors, wherever possible

... university project teaching staff

... secondary school project teaching staff

... guidance personnel

... tutor-counselor staff

... participating Bridge and nonbridge students, separately in groups

3

Admissions officers of the host institutions were queried for the purpose of ascertaining the amount of financial aid extended to Upward Bound graduates and to gain a comprehensive picture of the commitment of the host institution to the Upward Bound project it was sponsoring.

The data generated from these interviews and observations are contained in this chapter in narrative and tabular form along with conclusions about the significance of the data.

B. Analysis of Data From Field Visits

1. Project Directors

The present directors of the 22 projects studied were interviewed, in addition to some former and some assistant directors. A total of 31 directors and assistant directors were interviewed. Although each director did not answer every question, there were multiple responses to almost every question.

With respect to the questions, results will be tabulated in terms of: 1) the number of times a particular response occurred, and 2) the number of respondents expressing an attitude or opinion. Results are not presented in terms of percentages, as totals are too small to make this meaningful.

Responses from project directors can be grouped into the following areas: perceptions of program goals, such as their effectiveness, strengths, weaknesses. and problems of the program; perceptions of students and student attitudes; the recruitment, referral, admission, and retention processes; views of staffing, program elements, and involvement of students; awareness of host institution commitment and community and outside agency involvement with the program; and recommendations for change.

a. Background Data

Of the 31 project directors included in this sample, 20 were between the ages of 30 and 49. The majority, 25, were male; 22 were white (including 1 with a Spanish surname), and 9 were black.

Sixteen of the directors had held the position between one and three years; another four had been directors from three to four years; and three had been project directors for over four years. Before Upward Bound, 16 had been in administration and 11 had been teachers. About half, 18, worked for Upward Bound on a full-time year-round basis; 8 were full time in the summer and part time during the academic year; 4 were part time all year; and 1 did not indicate the amount of time worked for Upward Bound. See Table 25.

Table 25

Characteristics of Project Directors

Characteristics	Current Directors	Former Directors	Assistant Directors	Totals
Number	22	5	4	31
Sex				
Male	16	5	4	25
Female	6	-	-	6
Ethnicity				
White	12	5	4	21
Black	9	-	-	9
Spanish-surname	1	-	-	1
Indian	-	-	-	-
Time				
Full time, year round	17	1	-	18
Full time, summer; part time, year round	3	2	3	8
Part time, all year	2	2	-	4
No answer	-	-	1	1
Age				
20-29	1	-	1	2
30-39	8	1	1	10
40-49	8	1	1	10
50-59	2	2	-	4
60 and over	2	-	-	2
No answer	1	1	1	3
Years as Director				
Less than 1 year	6	-	-	7
1-2 years	6	2	1	9
2-3 years	4	3	-	7
3-4 years	3	-	1	4
Over 4 years	3	-	-	33
No answer	-	-	1	1

About one-third of the project directors had been selected through such university personnel as the president, dean of student affairs, Academic Senate Committee, etc. Four of the directors had submitted their own proposals to structure the Upward Bound program and had then been appointed by the university president; four were selected by the president in collaboration with previous Upward Bound directors, and the others by a variety of methods including some through the Public Advisory Committee (PAC) or Academic Policy Group (APG) recommendations.

Twenty-five of the 27 directors interviewed had at least 1 assistant and 11 of these had 2. Of the 36 assistants, 15 were black and 21 were white. Their major duties included a combination of planning and budget coordination, some community work and recruitment, and assistance in writing proposals and seeking financial aid information.

As shown in Table 26, the project director allocates between one-quarter and one-half of his time during the summer to administrative matters; staff recruitment and selection take up a similar proportion of hours; and whatever time remains is spent either on program design and development or in conferences. Seven directors mentioned spending between 5 and 10 percent of their time on community relations or liaison. Only one director indicated that he spent time in observations. It is felt that most directors spent time in observation, but reported this time among other categories, such as "staff" or "program."

Table 26

Allocation of Project Directors' Time During the Summer Program

Allocation	Percent of Time			
	1-14	15-25	26-50	51-100
Administration	3	8	6	1
Staff	1	8	5	-
Community	7	2	1	-
Program	2	5	3	1
Budgeting	1	4	-	-
Meetings	5	1	-	-
Conferences	-	4	5	2
Relations with university	2	1	-	-
Observations	-	1	-	-
Publicity	2	-	-	-
Student recruitment	3	2	1	-
Supervision of Upward Bound graduates	-	1	-	-
Home visits	4	-	-	-
Supervision (general)	-	-	2	1
Work with high schools	1	-	-	-
College placement	1	-	-	-
Miscellaneous	2	3	1	-

b. Perception of Program Goals and Effectiveness

Motivating underachievers toward college and personal success and developing the student's self-image and potential are the goals most frequently mentioned by Upward Bound project directors in response to an open-ended question. Twenty-four directors made 36 mentions of one or more of these as program goals. Academic improvement was cited in 12 responses by 7 directors, while 12 responses by 6 directors mentioned affecting the host institution, the community, and staff attitudes. Nine directors sought to give underachievers an opportunity for higher education. It is interesting to note that only a minority of directors view academic preparation as a goal although this is considered a major emphasis of the program. See Table 27.

Table 27

Project Directors' Perceptions of Program Goals

Program Goals	Responses	Respondents
Total	71	31
Affect personality, attitudes, self-image, motivation, potential	36	24
Affect academic performance, college entrance, college skills development	12	7
Affect host institution, high school, community, staff attitudes	12	6
Give underachievers and high-risk students a chance for a college education	9	9
Other: (provide environmental change, get financial aid for students, solve health problems)	8	8

As Table 28 indicates, perceptions of overall program strengths were judged most frequently in terms of program impact on student attitudes, motivation, or self-image (28 mentions made by 11 directors). Success was measured in terms of college admittance or academic improvement by 11 directors, and 5 directors cited effects on host institutions, community, or staff as measures for program success. It should be noted that these and other perceptions are subjective assessments by the project director who often confused programmatic structure with impact on students.

Table 28

Project Directors' Perceptions of Program Success

Program Success	Responses	Respondents
Total	53	30
Impact on students' attitudes, motivation, self-image	28	11
Success in college admittance; academic improvement	11	11
Success in affecting host institution, community, staff	5	5
Success in high school and college retention	4	3
Other	5	5

Eight of 15 directors who described their measure of success for the summer programs mentioned academic improvement, while 4 mentioned improved attitudes. See Table 29.

Table 29

Indicators of Effectiveness of Summer Program

Effectiveness	Responses	Respondents
Total	22	15
Affects students' academic achievement; prevents dropouts	8	8
Improves attitudes, self-image, responsibility	5	4
Provides environmental change, cultural enrichment	3	3
Other: (small classes, creative teachers, choice of courses, etc.)	6	4

For follow-up programs, Table 30 shows that effectiveness was measured more in terms of a holding action which tended to maintain student interest (9 of 15 directors), or to help students improve their high school grades (4 directors).

Table 30

Effectiveness of Follow-up Program

Effectiveness	Responses	Respondents
Total	23	15
Maintains student interest; gives support; prevents dropouts	12	9
Effective in tutoring, improving academic performance	5	4
Other: (staff is effective, Saturday classes helpful)	6	5

c. Perception of National and Local Program Strengths

Nationally, the program strength mentioned by 13 of 22 directors who responded was the freedom of interpretation permitted under OEO Guidelines, which allowed directors to structure programs individually. Nine directors valued the chance to "salvage" disadvantaged students as a national program strength. See Table 31.

Table 31

Project Directors' Perception of National Program Strengths

National Program Strengths	Responses	Respondents
Total	33	22
Freedom to innovate, develop unstructured program, interpret Guidelines, utilize Federal funds	18	13
Chance to salvage disadvantaged, affect attitudes, provide motivation	9	9
Other: (provide environmental change; national meetings, EAI support)	6	3

Table 32 demonstrates that similar factors were considered program strengths locally. Sixteen directors mentioned program flexibility, creativity or innovations which are often achieved through freedom to interpret Guidelines.

Table 32

Project Directors' Perception of Local Program Strengths

Local Program Strengths	Responses	Respondents
Total	59	28
Program innovations, flexibility, creativity	18	16
Effective, innovative staff members	13	9
Student development, attitudinal change	10	8
Community, parent, and high school involvement	10	10
Other: (exposure to college campus, university acceptance of program)	8	8

d. Perception of National and Local Program Weaknesses and Problems

The national weakness most frequently mentioned (in 11 of 43 responses), was in the area of communications with Washington. This included late funding information, administrative details, and insufficient information with respect to the transfer to OE. In addition, nine responses dealt with the need for more data, evaluation, follow-up, or liaison with other projects. Seven responses indicated that the programs were not reaching enough students; another seven dealt with inadequate Guideline definitions of such factors as poverty criteria, post-high school educational goals, etc. See Table 33.

Table 33

Project Directors' Perception of National Program Weaknesses

National Program Weaknesses	Responses	Respondents
Total	43	26
Communication problems with Washington, i.e., late funding, administrative detail, lack of information on transfer to OE	11	8
Insufficient data, follow-up, evaluation, liaison with other projects	9	5
Problems with Guideline definitions, such as unrealistic poverty criteria, post-high school educational goals	7	6
Does not reach enough students, consider student needs	7	7
Little impact on high school, university, educational policies	5	5
Other	4	4

Responses to a question on national program problems fell into similar categories: inadequate communication with Washington, need for more national program evaluations, need for more programs to reach more students, and better defined Guideline criteria. The latter was expressed in the words of one director, "Do you want to help an individual who is college potential or serve noncollege material? If so, say so. If you want a combination of these, say so. Make the Guidelines clear and concise."

Table 34 shows that 11 directors mentioned insufficient funds as a local weakness; 7 cited problems with program structure, administrative detail, or goals; 6 directors felt that there was inadequate parent or community involvement; 6 felt problems with university environment or involvement were program weaknesses. Seven directors said there was a need for more staff or student involvement and participation in program planning, activities, etc.

Table 34

Project Directors' Perception of Local Program Weaknesses

Local Program Weaknesses	Responses	Respondents
Total	51	30
Insufficient funds for summer and academic year programs	12	11
Problems with program structure, administrative detail, goals	11	7
Inadequate staff or student involvement	8	7
Weak parent or community involvement	7	6
Problems with university environment and involvement	6	6
Other: (no high school cooperation, program not integrated, political problems)	7	5

However, replies to a question concerning local program problems were slightly different: 12 directors cited university resistance as a local problem, 5 mentioned insufficient funds, and there were various responses concerning administrative detail, lack of freedom for the director, and personnel problems. One director stated: "The project director has too many agencies to deal with in order to get the job done. You can't buy a toothpick without going through an agency. The same applies to employment of personnel. The project director and staff do not have enough freedom to move and get things done."

e. Perception of Students and Student Attitudes

Data from a question concerning changes in the academic ability of entering students over the years produced 11 mentions of a shift in recruitment from high-risk to low-risk and more motivated students. Two directors attributed this shift to a Washington directive suggesting that the primary purpose of Upward Bound programs was to place students in college, which had resulted in restructuring selection mechanisms to emphasize acceptance of students more likely to be admitted to college and more likely to succeed in an academic atmosphere.

At the same time, in answer to a question on changes in student aspirations, 12 directors cited a general increase in academic interest or college orientation among students. Less closely related were the mentions by 11 directors of changes in attitudes toward high schools with students described as being more critical and less tolerant of deficiencies in their high schools after experience with Upward Bound programs. Four directors cited an improvement in high school grades after Upward Bound experience and four mentioned increased leadership or participation in high school activities.

Directors discussing current, as opposed to former, student attitudes toward summer programs described them as generally positive. As shown in Table 35, 15 responses cited improvements in motivation, academic commitment, loyalty to the program, and serious involvement.

Table 35

Project Directors' Perception of Changes in Students' Attitudes Toward Summer Program

Students' Attitudes	Responses	Respondents
Total	21	21
More motivation, academic commitment, loyalty to the program, serious involvement	15	15
No changes, attitudes always positive	3	3
Other	3	3

f. Perception of Recruitment, Referral, Admission, and Retention

Local high schools provide the major recruiting source for Upward Bound students. Twenty-seven directors mentioned use of high school personnel, ranging from principals to guidance counselors, as recruiters. The two other major sources mentioned were Upward Bound graduates and the local welfare or other community agencies (10 mentions each).

The recruitment process is also heavily dependent upon high school personnel,which received 17 mentions, and community agencies which were mentioned 12 times. In discussing admissions, 11 directors cited interviews with high school counselors as a key factor in the process and 8 mentioned interviews with Upward Bound staff members other than themselves. There were two specific mentions of test scores and three of high school grade records as an important part of consideration for admission, particularly in borderline or doubtful cases.

The usual basis for the project director's decision to admit an eligible student is his own assessment of the student's potential which is based upon his interview with the student, recommendations from high school counselors or teachers, or from other people who may know the student. Test scores or grades were mentioned by 10 directors in borderline or doubtful cases as useful.

Problems associated with referral, recruitment, or admission were mainly racial imbalance or poor program image according to 10 out of 28 respondents. Nine mentioned such problems associated with recruitment as the need for more males or for more high-risk students. Also mentioned was the problem of having too many qualified applicants to select or reject. Poor cooperation from parents, community, or high schools was mentioned by six directors. See Table 36.

Table 36

Project Directors' Report of Problems Associated with Referral, Recruitment, and Admission

Problems	Responses	Respondents
Total	43	28
Racial imbalance; poor image of program	11	10
Potential admissions exceed vacancies; need for more males, more high-risk students	9	9
Poor cooperation from parents, community, or high school	8	6
Guidelines inadequate; criteria subjective, poor definition of target population	6	5
Other: (distance problems, limited time, jobs, etc.)	9	7

Problems with racial imbalance seemed to exist regardless of region served. Project directors were also asked to rate programs on "enrollment of a student body of diverse racial background." Twenty-one directors rated their programs as "maximum" or "high" on this characteristic citing the maintenance of a 50 to 50 ratio of white to black students or, in certain regions, a balance among black, Indian or Mexican-American, and white students. However, 2 directors rated their programs highly on this characteristic although 85 to 90 percent of their enrollment was black, since this compared more than favorably with their host institutions. The primary reason given by the nine directors who rated their programs "medium" or "low" on this characteristic was a community attitude which opposed integration. Some directors indicated they had attempted to comply with the Guidelines but simply had had no success in recruiting white students for Upward Bound. Others mentioned that they were limited because the recruitment area or region assigned to their project tended to have only certain types of students.

Although project directors report few dropouts, they indicate that comparatively more students leave the program during the follow-up period than during the summer program. Asked to explain why, 11 of 27 respondents cited home or family problems or responsibilities, including marriage, as reasons for dropping out during the follow-up. Eight directors mentioned the students' need to earn money or desire for a career in the armed forces, and eight suggested less frequent contacts with Upward Bound staff and less attention as reasons for dropping out during the academic year. See Table 37.

Table 37

Project Directors' Perception of Why More Students Drop Out of Upward Bound During Follow-up Than During Summer Program

Reasons for Drop Out	Responses	Respondents
Total	35	27
Home, family problems, family responsibilities, marriage	11	11
Less frequent contacts, less attention, small staff	11	8
Students need jobs, want army careers	8	8
Other: (migration, geographic problems)	4	4

Project directors mentioned a variety of efforts to salvage students who were potential dropouts, such as home visits to talk with parents and students, visits to the high school to consult with guidance personnel, and some use of social workers or professional counseling and therapy. There were almost no instances of students being permanently excluded from programs unless they had elected to leave. Ten directors rated their efforts to prevent dropouts as generally successful, six as unsuccessful, while others expressed mixed reactions.

g. Perception of Upward Bound Graduates

When questioned about the performance of Upward Bound graduates in college, the directors agreed that they appeared to be doing as well as, or better than non-Upward Bound students.

The relationship between the Upward Bound program and Upward Bound graduates appears to be an informal one consisting of visits to the Upward Bound office by numbers of graduates who are given assistance from Upward Bound staff such as counseling, advice on curriculum choices, or help in finding tutors.

h. Perception of Staff Recruitment, Retention, and Rotation

University personnel, who teach primarily in the summer programs, are recruited from host institutions; referrals for teaching positions are made by former Upward Bound faculty or host university faculty. Secondary school personnel used in both summer and follow-up periods are recruited through local high schools; referrals come from former Upward Bound teachers and also from student recommendations.

Guidance and counseling personnel are recruited through local high school systems, both for summer and,occasionally,for follow-up periods. The host institution plays a minor role in supplying these personnel.

Thirteen directors mentioned that they recruited their tutor-counselors through the host university, sometimes from the Department of Education, but frequently from a variety of other departments. Seven directors mentioned former Upward Bound students as important sources from which they drew tutor-counselors Although some projects have tried to recruit from other colleges or universities, this appears to create time and travel problems. If used at all in follow-up programs, tutor-counselors usually come from the host college or university.

Difficulties in recruiting staff center around finding qualified personnel who are equipped to handle high-risk students and are able to teach in a nontraditional fashion. Retention problems from year to year arise over salary limitations, the fact that summer programs are limited to full-time personnel, difficulty in relating to university staff, or lack of university rank for Upward Bound staff.

Use of resource and nonprofessional personnel in Upward Bound programs appears negligible. Two or three directors did hire community people to work for the program and provide liaison or aid in recruiting or counseling students. With these exceptions, nonprofessionals seldom participated in summer programs. During follow-up periods, they seem to have been used only at special events or meetings where speakers from the community are brought in.

Although most programs do not have planned staff rotation, a one-third turnover occurs each year as teachers leave for other jobs or more schooling. Three directors of programs which did have planned rotation said they believed it was necessary to get rid of noncreative staff members, while two said project directors should also be rotated. In general, directors explained the rationale for nonrotation as the need for a stable and understanding group of staff members which took time to develop. Five directors mentioned that some rotation occurred normally so that there was no need to plan for it.

i. Perception and Assessment of Elements in Summer and Follow-Up Programs

About three-fourths of the projects in the sample reported a fairly standard curriculum for the summer program composed of basic subject areas such as math, English, science, and social studies. Half of the programs also listed electives, either special courses or music, drama, or speech. Seventeen directors reported college credit courses in the program, usually in English or math and usually for Bridge students only. Upward Bound class size ranged from 11 to 20, with only three programs reporting class sizes of 10 or less.

Tutoring during the summer was handled by tutor-counselors, according to 17 directors; four mentioned use of university or high school faculty as tutors, and four used host university college students. Sixteen programs reported having full-time guidance counselors; four said they used the project director or his assistant to counsel students; and three resorted to group counseling in some cases.

Remedial activities in basic reading skills or a reading laboratory were reported by 13 directors; six included remedial math in the curriculum. Still other projects scheduled remedial work at the request of individual students.

Major innovations in summer programs included: student participation in planning the program and selecting their own courses (6 responses); staff creativity or flexibility in team teaching or use of discussion techniques (4 responses); and curriculum innovations including flexible time periods and division of the schedule into academic and creative interest areas (7 responses). One of the most effective summer program elements, according to eight directors, was the strong academic program with core subject areas while six directors cited student participation and student activities.

Least effective summer program elements cited were: problems with tutor-counselors in fulfilling counseling functions or tutoring responsibilities (4 responses); problems with program structure such as overemphasis on academic subjects (2); lack of depth in subjects due to too many lectures (2); dead areas of time when no activities were scheduled (2); and lack of student attendance and participation (3 responses).

Tutoring sessions in the form of regular Saturday school activities or tutoring as requested by individual students are the major elements in follow-up programs as described by most directors. There were some

Upward Bound clubs in feeder high schools but these were utilized mainly to make tutoring available in a centralized location. The rural programs in the sample had developed some special techniques such as mail contact and visits of several days' duration by counselors for handling follow-up programs since distance and travel problems often prohibited setting up a regular weekly or monthly program. In addition to yearly reunions, one program included personal visits to students by the project director or his assistant; such meetings served as a check on the student's progress and also as a personal contact so that interest in the program was maintained.

Project directors were asked to rate their programs on "recognition that the academic year is just as important as the summer." While most agreed with this, they had found implementation difficult. Few directors rated their programs maximum in this area and only 10 rated their efforts "high." Some of these described using tutor-counselors as teachers during the follow-up, regular Saturday school programs, or year-round tutoring activities. Reasons given by the directors who rated their programs median, low, or insignificant on this characteristic included distance problems affecting rural programs and smaller staff due to budget limitations which affected both rural and urban follow-up programs.

Major innovations in follow-up programs were: intensive tutorial sessions (4 responses), small classes (4 responses), Upward Bound club programs in the high schools (4 responses), and faculty involvement (4 responses). Tutoring sessions and Upward Bound clubs were also mentioned as the most effective follow-up elements.

Weak links perceived in the follow-up programs included: lack of parental or community involvement (5 responses), infrequent contacts between students and staff (4 responses), program problems such as some ineffective classes (2), and inability to develop or maintain Saturday tutoring programs (3).

Program elements designed to promote nonacademic goals included student participation in government or judiciary boards (11 mentions), newspapers or literary publications run by students (8 mentions), and student discussion groups, general meetings, and assemblies (8 mentions). All of these activities take place mainly during the summer; the follow-up programs do not include these elements, except for five projects which maintain Upward Bound clubs in the high schools.

Major problems in this area were poor attendance (6 mentions) and lack of funds for trips, banquets, or other activities (5 mentions). Five programs cited extensive and costly travel as a problem during follow-up programs which prohibited nonacademic activities.

j. Perception of Student Involvement

Twenty directors cited student program evaluation sheets or forms which were completed at the end of the summer program as evidence of student involvement in Upward Bound programs, and 17 mentioned student aid in recruiting other students for Upward Bound programs. Other evidence of student involvement mentioned were their suggestions for curriculum additions or improvements (9 responses), and student participation in program planning by attending meetings with faculty or administration. Three directors mentioned that students made recommendations for new staff members.

The structures created to involve students in the program were similar to those cited as "extracurricular, nonacademic activities." Student council or government was mentioned by 10 directors, student senate or judiciary committees by 4 directors, a student advisory committee by 3 directors, and a staff-student committee by 5 directors.

k. Perception of Involvement of Host Institutions in Upward Bound Programs

Mentions of accommodations made by host institutions to Upward Bound students included giving first consideration to their applications for financial aid according to 16 project directors. Three directors felt that grading policies for Upward Bound college enrollees were "a little easier," while two directors mentioned that the host institutions relaxed their admissions standards for Upward Bound students.

On the other hand, 11 directors found it "more difficult" now to get financial aid from the colleges compared with past years; 6 attributed this to a decrease in Federal funds available, while others suggested that there had been an increase in the demand for funds or that the Federal government had become disinterested in providing the colleges with funds to help these students. Six directors, who felt the institutions were making it easier to obtain financial aid, suggested that this was because Upward Bound graduates were performing well in college and because Upward Bound now has four years of experience in obtaining funds for its students. Seven directors rated their ability to get financial assistance as the "same" over the years.

To the question: "Are fewer students being admitted to the host institution?", all the directors but one answered "No." This one cited personality problems which were creating a "backlash" as the reason that fewer students were being admitted to the host university.

When asked: "Are fewer students being admitted to other schools?", the directors again answered in the negative.

The involvement of the universities in Upward Bound was also examined in light of the directors' assessment of the degree of recognition by the host institution of the opportunity to use the program to increase skills in teaching students from diverse backgrounds. The 10 directors who labeled achievement in this area as maximum or high, reported development of special programs for teachers at the host institution, or a redefinition of college admissions policies to include more blacks or disadvantaged, or more substantial use of host university faculty in the program. Two-thirds, however, rated their host schools' involvement as medium to insignificant.

An area where directors felt there is substantial evidence of university involvement is in effective use of university students as tutor-counselors. Nineteen directors rated achievement in this at maximum or high. They reported that the host university was used exclusively or extensively as a source for tutor-counselors, and that special tutors were also available from the university. This applies mainly to summer programs. Use of tutor-counselors during follow-up periods is less extensive and occurs mainly through their leadership in Upward Bound clubs, occasional tutoring, or home visits.

1. Perception of Involvement by Outside Agencies or Individuals

CAP agencies were cited by 13 directors as the primary evidence of community involvement in Upward Bound programs. Additional evidence of community involvement were relations with civic groups such as the PTA, League of Women Voters, etc. (9 directors), city councils and agencies such as welfare, courts, and juvenile homes (8 directors) and medical institutions and hospitals (8 directors). However, in assessing the effectiveness of community involvement, 14 directors rated it ineffective because, in their view,community involvement could and should be much greater.

A Public Advisory Council (PAC) exists in most programs, but only on paper, with respect to its intended functioning. For most directors its functions were defined as liaison with the community (8), an aid in recruitment or referrals (6), an advisory body (5), and as an aid in curriculum planning (5). About half (15) of the project directors rated the PAC as relatively ineffective with little or no influence on programs. Those who found it useful based their rating on its use in relations with the community (3), in giving advice or suggestions (2).

Reports of the ratio of parents on PACs varied from 30 to 80 percent, with the rest of the PAC membership made up of CAP leaders, local community leaders, and secondary school and university personnel. Three directors cited use of former and current Upward Bound students on the PAC. In general, it appeared that the poverty community was adequately represented on the PACs.

The most commonly reported problems encountered with PACs were general disinterest and lack of participation on the part of the PAC members (6 responses), and expenses incurred since members sometimes had to travel great distances to attend meetings (4 responses).

According to most directors, except for a change in parent membership as their children graduated from Upward Bound, the only other change mentioned was some increase in the number of community leaders or members on the PAC (4 responses).

Seven directors stated that PAC meetings were held about once a month or 10 to 12 times a year. Six reported that their PACs met 4 to 6 times a year, and another six met only once or twice a year.

The Academic Policy Group (APG) fared slightly better in terms of precise definition of responsibility and reported effectiveness. Ten directors reported that APG functions involved program planning and consultation, nine said they encompassed curriculum planning or revision, and six saw them as an aid in the recruitment process, primarily of staff. The APG was rated as generally valuable by ten project directors, as specifically helpful in involving the university in Upward Bound programs by six directors, and three qualified its value by indicating that three or four individuals on the APG made valuable contributions. Eleven directors reported that APG meetings were held between one and four times yearly. Several reported no meetings held at all, and that the APG was a paper organization.

Evidence of effectiveness of parental involvement is also limited. Thirteen directors mentioned that their programs, particularly in the summer, included Parents' Days, assemblies, and banquets; only 4 cited parental involvement during follow-up programs, either in meetings or informal contacts with staff members on home visits. Such measures were rated "generally effective" by 16 directors; another 13 directors rated parental involvement "ineffective", or so infrequent that it was difficult to make a judgment. It should be pointed out that these ratings are highly subjective and in view of the small numbers reporting involvement, assessment of effectiveness is questionable.

The major contribution attributed to parents of Upward Bound enrollees by 11 directors was giving moral support or encouragement which helped to maintain student interest and cooperation. Three directors mentioned that parents helped by learning to fill out financial aid forms, and three directors cited increased understanding and communication as a result of parental involvement.

Most problems with parental involvement concerned lack of interest and participation (6 responses), and time, resource, or money problems associated with parental involvement (5 responses).

m. Recommendations

Since so many recommendations for local and national program changes were made with specific reference to individual programs in the sample, it seemed best to consider by category. Total responses in each particular category were made by from 7 to 14 directors.

Administrative - National

Directors recommended more freedom for project directors to develop and innovate in their programs, more commitment to Upward Bound programs by universities and Congress, more communication with Washington, a revision of the income criteria which were considered unrealistic, and more national evaluation, research, and conferences.

Administrative - Local

Directors suggested more local research and publicity on programs, more freedom for the director in program decision making and in use of funds and a less bureaucratic host-college-dominated structure.

Program - National

Project directors suggested program changes such as: more program flexibility, less emphasis in the Guidelines on college as the only goal, restructuring the role of the PAC, and clarification of the racial balance proviso.

Program - Local

Among the recommendations were curriculum changes, earlier selection and recruitment of students, more modern equipment, and more speakers and interest groups.

Staff - Local (only)

Suggestions for improvements in staff included recruitment of better teachers, more screening of tutor-counselors, more staff specialists, more dormitory supervision, and assignment of tutors to the high schools during the year.

Funding - National (only)

In addition to requesting more funds in general, directors suggested stipends for Upward Bound graduates in college, higher staff salaries, funds for Bridge students before college, and program funding for a two-year cycle.

Project-Host Relations - National

Directors recommended more cooperation and responsibility from universities and Washington.

The following comment is illustrative:

> Universities should have more Federal funding support to take kids in ... Higher education in this country must take responsibility for educating the disadvantaged, even if it means fewer projects.

Project - Host Relations - Local

Directors favored improvement in relations between Upward Bound and university personnel; more community, parental, and high school involvement; more funds for travel during the academic year; and special high schools for Upward Bound students.

Research - National

Directors requested more national data on Upward Bound graduates, dropout rates, effective teaching procedures, problems and values of disadvantaged populations, student's background and parental value systems, and more follow-up studies.

Research - Local

Directors indicated more local research on each individual project and its problems.

n. Conclusions

Some areas of success and problems are summarized by the following statement of a project director:

> In terms of the discovery of young people who have been overwhelmed by the society, the project has found them; in terms of dealing with self-image problems, the project has had noticeable influence. The strategies used have, in some instances, been failures. Students have avoided classes (regardless of names). We have tried "classless classes" with a team of teachers. What has been missing is a real "student-directed" curriculum.

Many project directors pointed out that the two quantifiable elements linked with Upward Bound program success, college enrollment and college retention, fail to tell the complete story of Upward Bound. They spoke of the postive personality changes produced in the shy and withdrawn and in the hostile, aggressive youngsters. They indicated the growth of hope and motivation among students who heretofore had been listless, apathetic, and defeated. And they described with pride the sense of community, the ethno racial harmony, and the closeness between students and staff created by the program.

Field analysts were in unanimous agreement that the tone and often the quality of an Upward Bound program was set by the project director. The director who made himself ubiquitous, monitored his program daily, and knew all his students, produced an atmosphere of personal dedication to the needs of the participants. The director who gave specific definition and granted equal importance to the roles of his staff invariably created trust and teamwork. It was indicated that programs needed a firm hand and a structure combined with flexibility. Student contributions to program design should be utilized and valued, but to permit students to do as they saw fit, fritter away their time, choose to attend or not to attend classes or activities, was viewed as abdication of responsibility. Fortunately, only a small number of programs exhibited these latter qualities. In those instances, the permissiveness was an attempt to countervail the strict, lock-step structures of some of the high schools from which the participants came.

2. Secondary School Personnel

Secondary school teachers interviewed in this sample came from a variety of subject areas and most had had substantial experience in high school teaching. They evidenced a strong interest in the problems of disadvantaged students; however, for many, teaching in Upward Bound programs was their first direct experience with this kind of student. They reported that their experience with Upward Bound had had some effect on their teaching methods and on increasing their awareness of student needs and individual problems.

Field analysts tried to interview at least two secondary school teachers in each of the 22 programs in the sample. In some projects, three teachers were interviewed; in others, only one. When possible, teachers who had spent more than one summer with Upward Bound were selected. The teachers were selected by the field analysts from a complete staff list supplied by the project director.

a. Background Data

Of the 41 secondary school teachers interviewed, 23 were male and 18 female. Twenty-four were between the ages of 22 and 40, and 21 were white, including 2 with Spanish surnames, 15 black, and 2 Indian. Fifteen had held their present secondary school teaching position between 2 and 5 years, and 17 had taught from 5 to more than 10 years. The subjects they taught in Upward Bound programs included the full range from math and science to the humanities. See Tables 38, 39, and 40.

Table 38

Age of Secondary School Personnel

Age	Number
Total	41
20-21	2
22-29	12
30-39	12
40-49	7
50-59	2
60 or over	1
No answer	5

Table 39

Length of Time in Present Secondary School Position of Secondary School Personnel

Length of Time	Number
Total	41
Under 1 year	3
1 year but less than 2 years	5
2 years but less than 3 years	5
3 years but less than 5 years	10
5 years but less than 10 years	10
10 years or more	7
Does not apply	1

Table 40

Subject Taught in Upward Bound Program by Secondary School Personnel

Subject	Number
Total	38
English	6
Reading (remedial or speed)	3
Math	8
Natural science	5
Math and science	2
Social science	3
Drama and art/humanities	3
Foreign language	1
Physical education	1
Stenography	1
Other (guidance work)	5

As is evident in Table 41 slightly more than half of these teachers came from schools with less than 10 Upward Bound students. Sixteen teachers were not cognizant of the number of Upward Bound students in their schools.

Table 41

Number of Upward Bound Students in the Schools at Which Secondary School Personnel Taught

Number of Students	Number of Programs 1966	1967	1968	1969
Total	5	11	26	25
10 or less	2	6	14	13
11-20	1	3	8	9
21-30			2	2
31-50	1	1	1	
51-70				
71-80	1	1	1	1

b. Perception of Program Goals

Secondary school teachers in Upward Bound most often perceived program goals as positive personality growth and change, primarily, followed by academic support and adjustment. See Table 42.

Table 42

Secondary School Personnel: Perceptions of Goals

Goals	Responses	Respondents
Total	74	40
Personality growth	30	26
Academic support and achievement	24	24
College preparation	16	16
Increased earning power	4	4

c. Perception of Program Strengths and Weaknesses

Most commonly reported program strengths, in the opinion of secondary school teachers, as shown in Table 43, included the opportunity to improve their own classroom techniques, to effect productive personality changes, and to provide cultural enrichment.

Table 43

Secondary School Personnel: Perceptions of Program Strengths

Strengths	Responses	Respondents
Total	48	36
Improved classroom techniques	20	16
Produced positive personality changes	12	12
Provided cultural enrichment	11	11
Effected academic improvement in high school	5	5

Academic deficiencies and poor planning of program structure, and subject matter, were the major deficiencies cited. Also mentioned was weak administration. See Table 44.

Table 44

Secondary School Personnel: Perceptions of Program Weaknesses

Weaknesses	Responses	Respondents
Total	38	31
Academic deficiencies and poor classroom planning	28	21
Weak administration	5	5
Other	5	5

Limitations on the number of students accepted was also cited as a major weakness. Most (27) teachers attributed this to inadequate funding. Lack of communication with high schools was also cited as a reason for the limited number of Upward Bound enrollees by nine teachers.

d. Perception of Impact on Teachers and Secondary Schools

In terms of Upward Bound impact on the high schools, 10 teachers cited curriculum changes and some noted a greater emphasis on new teaching methods. Specifically, eight mentioned audio-visual aids and seven cited the use of learning games as innovative classroom techniques. Six teachers cited use of programmed learning materials as innovations also. One teacher said:

> ...I've changed some of my teaching methods; I realize I don't have to follow step-by-step. What's good for the student? I never asked myself this. I now have more flexibility. But Upward Bound doesn't reach enough kids to have an effect on the high school. They only take 4 or 5 out of a group of 2600 and no one knows. In addition, Upward Bound isn't publicized. No one knows except the people involved....

Positive changes in attitude among secondary school personnel, such as teachers sharing Upward Bound experiences, and increase in positive attitudes toward Upward Bound among high school staff members were cited by 17 and 11 responses respectively. Eleven teachers cited a more permissive or relaxed high school atmosphere in recent years and an equal number mentioned use of special high school teachers for Upward Bound students.

e. Perception of Impact on Students

Both intellectual and personality growth were cited by secondary school teachers as major areas of impact of Upward Bound on students. Comments such as the following were examples:

> Upward Bound has given powerful impetus to kids from worst possible backgrounds--including the toughest street gangs. It has motivated them to stay in school, to study, to raise their grades, to go to college. There has been amazing development in participation in school activities including Student Council, athletic teams, service squads, and clubs. To some extent, there is a change in their associations. Upward Bound students usually prefer to associate with other Upward Bound students.

Eighteen teachers indicated that personal development, in terms of students' positive self-image and ability to relate to others, had occurred as an outcome of Upward Bound classroom experiences. Other areas of impact mentioned were development of logical and disciplined thinking and positive attitudes toward learning.

f. Perception of Involvement by Outside Agencies and Individuals

Although the majority of secondary school teachers had not met with the PAC, 25 did say they had met with parents of Upward Bound students. Parental involvement was described as being about the same as that for parents of non-Upward Bound students. The need for more parent and community involvement generally was cited.

g. Recommendation

Secondary school teachers appeared to be more often concerned with academic deficiencies in Upward Bound students than other personnel. Their primary recommendation concerned improvements in curriculum and teaching methods. See Table 45. However, their comments also indicated that Upward Bound had, in some ways, been responsible for creating a new emphasis on revised teaching methods in the high schools.

Table 45

Secondary School Personnel: Suggestions for Program Improvement

Improvement	Responses	Respondents
Total	41	33
Improvement in curriculum structure and classroom techniques	28	27
Emphasis on personality growth	5	5
Improved administration	4	4
Increased funds	4	4

3. University Instructional Personnel

a. Background Data

Thirty-nine instructional personnel from universities were interviewed in the sample. They were selected from a complete staff list furnished by the director. An attempt was made to obtain interviews with at least two instructors from each school, but this was not always possible. Of this group, the majority (31) were males; 8 were female. Most (26) were between 22 and 40 years of age. Twenty-seven instructors were white, 10 black, and 2 were oriental.

Two-thirds of the university staff members had been at their positions for two years or more. Nine had been at the university between 5 and 10 years, and three for more than 10 years. The subjects they taught in Upward Bound programs varied from natural science through humanities. See Tables 46, 47, and 48.

Table 46

Age of University Personnel

Age	Number
Total	39
22-29	11
30-39	15
40-49	7
50-59	2
60 or over	2
No answer	2

Table 47

Length of Time in Present Position of University Personnel

Length of Time	Number
Total	39
Under 1 year	1
1 year but less than 2 years	7
2 years but less than 3 years	10
3 years but less than 5 years	5
5 years but less than 10 years	9
10 years or more	3
Does not apply	4

Table 48

Subject Taught in Upward Bound Program by University Personnel

Subject	Number
Total	39
Humanities	3
Natural science	5
Social science	6
Math	3
English	7
Speech	5
Language	1
Physical education	1
Communications	2
Other	3
No answer	3

b. Perception of Program Goals and Effectiveness

Like the project directors, university personnel in Upward Bound programs stated goals most frequently in terms of motivational and social development, as can be seen in Table 49. Student changes were perceived in terms of their self-image and personal growth. Another goal mentioned was academic development and improvement in basic skills. Providing for underachievers, rural students, and the disadvantaged, were also cited as goals. It is interesting to note that university teachers, who should be aware of the basic needs for improved academic skills by these youngsters when entering college, give this goal less status than that of motivational and social development.

In evaluating program effectiveness, 20 university teachers rated their programs as "generally" or "very" successful. Others mentioned specific aspects, such as academic improvement during follow-up periods (6), improved student-teacher interaction (4), and success with individual students (8).

Table 49

University Personnel: Perception of Program Goals

Goals	Responses	Respondents
Total	89	35
Improve social and/or race relations	22	11
Improve academic skills, develop basic skills	21	15
Develop motivation for college career; improve attitudes toward learning	20	19
Develop student as an individual	4	4
Provide for special types of students (underachievers, rural students, disadvantaged)	12	10
Other	10	10

c. Perception of Impact on Students

The instructors most frequently spoke of program impact on Upward Bound students in terms of increased motivation, participation (62), or changes in attitudes and self-image (42). See Table 50.

Table 50

University Personnel: Perception of Program Impact on Students

Impact	Responses	Respondents
Total	51	38
Increased motivation and participation	62	24
Attitudinal changes, improved social relations	42	31
Improved academic performance	16	16
Individual success	15	12
Negative perceptions: delinquent associations, little academic improvement, poor attendance, etc.	16	10

d. Perception of Impact on Host Institutions and their Staff

University personnel noted such program impact on host institutions as: changes in admissions standards to include more black and disadvantaged students with a corresponding improvement in race relations; some curriculum changes in the form of special programs or additional courses in Black History, Problems of Disadvantaged Students, etc.; greater awareness on the part of some university instructors of students as individuals with special needs and backgrounds. Fourteen teachers perceived either few positive or some generally negative effects on university staff as a result of Upward Bound. See Table 51.

Table 51

University Personnel: Perception of Program Impact on Host Institutions and their Staff

Impact	Responses	Respondents
Total	76	36
Changed admission standards resulting in higher admission rates of black students and improved race relations	20	16
Curriculum changes such as courses added and special programs	19	15
Staff more aware of students as individuals	17	14
Little or no effect; negative effects on staff	14	13
Other	6	6

Specific innovations in teaching included use of new library and visual aid materials which was mentioned by 16 university instructors and class discussion groups mentioned by 10. Also mentioned by four instructors were games used in teaching math, language, etc. and the use of dramatics in English class was cited by five staff members. The most frequently cited purpose for innovative classroom techniques was to develop students' self-image and social relationships (15 responses), ability to relate to others (8) or develop logical, disciplined thinking (9).

e. Perception of Feeder High Schools and their Relation to Program

From a negative viewpoint 24 responses cited awareness of high school defects, such as poor teaching and lack of motivation of teachers, which had affected Upward Bound students, and an overemphasis on discipline in the high school.

Meetings between university personnel teaching in Upward Bound programs and high school faculty occurred on an irregular basis. A few conferences between individual teachers took place but there was generally little contact. Most university instructors saw no change in the attitudes of high school teachers. The gap between high school and college in terms of Upward Bound was succinctly expressed by one teacher in this group of university personnel who said:

> The problem is that Upward Bound is a program and not a fundamental part of the educational system. The regular public education system is a formidable opponent to what Upward Bound proposes to do for students. Success is limited to the few students who are admitted to Upward Bound and the public education system remains apart from its aims and objectives. Success is necessarily, therefore, limited.

More than half (19) of the university personnel stated that they received either insufficient or no feedback on Upward Bound students during the academic year.

f. Perception of Student Recruitment and Selection

University personnel are, for the most part, not involved in the recruitment and selection process. They cited high school teachers, guidance personnel, and administrators, as well as the project director and his associates, as those doing most of the selection. As far as university staff were aware, sincerity of student's interest, low family income, and college potential were the factors governing selection. Reasons for additional students not being included were thought to be financial and quota limits set by Washington. Weak recruiting efforts and the students' need to earn more income were also mentioned as limitations on enrolling more students.

g. Perception of Involvement of Outside Agencies and Individuals

University personnel had little contact with community agencies or groups such as the PAC; most had never met with the PAC at all. Their meetings with parents of Upward Bound students were also infrequent; 11 mentioned that they had met with parents only on social occasions such as the special days set aside for this purpose during the summer.

h. Recommendations

Table 52 indicates that the improvements most frequently suggested by university teachers included changes in program structure by emphasizing academic skills, lengthening the time the program should run, and creating a climate conducive to attitudinal change toward learning (23 mentions). The need for better communication between staff and students was cited in 16 responses and the need for more university services and involvement was cited in 7 responses.

Table 52

University Personnel: Recommendations for Program Improvements

Improvements	Responses	Respondents
Total	56	35
Changes in program structure by emphasizing academic skills, lengthening program,and improving attitudes toward learning	23	13
Need better staff communication and more emphasis on relations between students and staff	16	15
More university services and involvement	7	6
Other	10	10

Since almost no university personnel are used in the follow-up program, suggestions by this group for improving follow-up did not appear to be significant.

i. Conclusions

University teachers in Upward Bound programs do not appear to be substantially involved; although they enjoy teaching and most evidenced a sincere interest in the students, their input into programs is limited to teaching. Contact with Upward Bound does not appear to have increased contact between high school and university personnel. While this may be due to lack of effort from the high schools, it can also be attributed to insufficient interest on the part of the university teachers.

Three programs no longer used university personnel on their staff; others had problems in attracting and holding university personnel because of low salary levels. In some programs, project directors were dissatisfied with university personnel because of their teaching methods emphasizing lectures rather than group discussions which, they felt, were generally unsuccessful with Upward Bound students.

4. Guidance Counselor Personnel

The role of guidance counselor or program specialist in Upward Bound programs encompasses both career and personal counseling. Guidance counselors are also available to students as program specialists; their work complements that of the other full-time Upward Bound staff members thus providing complete services for Upward Bound students.

a. Background Data

Of the 32 guidance personnel interviewed in this sample, 19 were guidance counselors only; 7 were assistants to the project director as well as counselors, 4 were program specialists (usually reading specialists), and 2 were dormitory directors who also fulfilled counseling duties. At least one counselor who had been with each Upward Bound project longest was interviewed in each project. Others were likewise selected, when available, who were most familiar with the students.

Nineteen of the counselors were high school personnel. Many had had extensive experience as counselors; 10 had had between 5 and 10 years of experience, and 7 had had more than 10 years in this field. Length of experience with Upward Bound programs varied from less than 1 year (8 respondents) to 3 or 4 years (6 respondents). See Tables 53 and 54.

Table 53

Guidance Personnel: Number of Years in Profession

Years	Number
Total	32
0-2 years	8
2-5 years	4
5-10 years	10
10 or more years	7
No answer	3

Table 54

Guidance Personnel: Length of Time in Program

Time	Number
Total	32
Less than 1 year	8
1-2 years	5
2-3 years	3
3-4 years	6
No answer	10

b. Perception of Adequacy of Guidance Available in Summer and Follow-up Programs

Twenty-one of the 32 counselors interviewed felt that guidance and counseling was adequately represented in the summer programs. Eleven did not. Reasons given for inadequate guidance in summer programs included lack of full-time counselors (2 responses), the need for more professional counselors (2), and the need for more funds for counseling (2).

Eleven guidance personnel stated that counseling was adequate during follow-up programs; 12 did not agree. Other counselors had not been involved in the follow-up program. Lack of counseling staff (5 responses), the need for more time set aside for counseling (3), the need for a full-time counselor (2), and distance problems (1) were given as reasons for inadequate counseling during follow-up periods.

c. Perception of Students and Students' Attitudes

Guidance personnel were asked to evaluate the characteristics of Upward Bound students by expressing their reactions to a list of characteristics, including "energetic," "bright," "motivated," etc., and to compare Upward Bound students with others with whom they had worked in their professional life. As shown in Table 55, 15 respondents saw Upward Bound students as more "motivated," 13 as more "self-determined," and 11 each as more "articulate," "responsible," or 'bright.' A number of the counselors felt they had not seen enough of the participants to evaluate them. Comments included ideas such as:

> Upward Bound students are motivated to achieve and have high expectations for themselves. They are aware of the problems in the community and the world because of their classes in Upward Bound. While some were shy at the beginning they became open and talkative after involvement in the program.

Change in self-image, expectations, and goals were cited as evidence for higher motivation in Upward Bound students; increased activity and enthusiasm were mentioned as factors influencing other changes.

Table 55

Perception of Upward Bound Students
Compared with Other Students

Students	Yes Responses	Total Responses
Seem more:		
Motivated	15	21
Self-determined	13	17
Articulate	11	17
Responsible	11	16
Bright	11	17
Nervous	10	14
Energetic	10	15
Politically aware	9	12
No differences between Upward Bound students and other students	4	19

d. Evaluation Instruments Used

Eight respondents used Preliminary Scholastic Aptitude Test (PSAT) and Scholastic Aptitude Test (SAT) as evaluative instruments in their programs; five counselors used the California Reading Test, and three based evaluation on the Nelson-Denny Reading Test. Other instruments mentioned included Kuder Vocational Preference, the Iowa Silent Reading Test, and five cited a general evaluation test which had been developed within the project. Counselors from eight programs did not cite use of any particular test. Of those tests used, the majority appeared to be either reading tests or personality inventories.

e. Recommendations

Many of the guidance personnel interviewed were either satisfied with Guidelines and expressed a desire that the Guidelines remain flexible, or were unfamiliar with them and had no particular suggestions. Of those suggesting changes, five responses were in the area of staff changes. The following comment is illustrative:

> Nonprofessional guidance is being offered and assumed to be as valuable to a student as that offered by a professionally trained and experienced counselor.

> A higher quality of guidance beyond being warm and supportive is needed. The nonprofessional is unrealistically shielding the student from school and life demands. The professional tends not to disregard the realistic aspect.

Guidance personnel also suggested use of more university or college faculty in Upward Bound programs and better staff selection. Seven counselors suggested more emphasis on counseling, more recreational activities, more staff meetings, etc. See Table 56.

Like the project directors, guidance personnel perceived the need for more research on factors in Upward Bound projects. Recommended were follow-up studies on Upward Bound graduates; studies on factors leading to success in projects like Upward Bound; regional studies comparing Upward Bound projects and students from different areas; research on tests which would measure motivation; individual case studies on Upward Bound students; and attitude studies.

The need for university cooperation and staff cooperation was expressed in the following statement:

> Selection of the institution to host a Upward Bound program is crucial...We also need a staff that participates in after-school activities. There should be contract stipulations which request this...The "academic" is needed but we can't improve the student's performance in this short time. We know we can affect his attitude which can eventually affect his performance.

Table 56

Guidance Personnel Recommendations

Recommendation	Responses	Respondents
Total	41	34
Program: more emphasis on counseling; more recreation; longer summer program; more staff meetings; credit courses	7	4
Staff: more professional guidance personnel; more college faculty; better staff selection	5	4
Research: more follow-up studies on graduates; data on factors leading to success; regional comparisons of projects and students; tests to increase motivation; individual case and attitude studies	12	10
Guidelines: better definition of target population, revised economic criteria; emphasize high school-university cooperation; hold regional meetings and examine differences; select students earlier (7th or 8th grade); retain flexibility	17	16

f. Conclusion

Guidance personnel perceive the need for professionally trained counselors in Upward Bound programs. They did not suggest that tutor-counselors were not necessary, but that professional counseling is a basic need in the programs.

5. Tutor-Counselor Personnel

a. Background Data from Project Directors

Information from project directors indicates that 12 programs in the sample hired between 9 and 14 tutor-counselors during the summer of 1969, while 6 programs had between 4 and 8 tutor-counselors, and the other 4 had 15 or more. As shown in Table 57, this has been the general pattern of size of teacher-counselor groups with some variation, since the beginning of the program in these 22 projects.

Table 57

Number of Tutor-Counselors per Summer Program[a]

Number of Tutor-Counselors	Number of Summer Programs 1966	1967	1968	1969
1-5	2	1	0	3
6-8	2	2	5	3
9-11	7	6	4	4
12-14	2	4	6	8
15	4	5	6	4
Don't know	1	1	0	0
No answer	4	3	1	0

[a] SOURCE: Project Directors.

During the follow-up periods, seven programs listed seven or more tutor-counselors; eight programs had from one to six, and five programs did not use them at all. This pattern, also, seems to be generally consistent from 1965 through 1969. See Table 58.

Table 58

Number of Tutor-Counselors per Follow-Up Program[a]

Number of Tutor-Counselors[b]	Number of Follow-Up Programs 1966	1967	1968	1969
1-2	1	1	2	3
3-4	2	2	3	3
5-6	-	2	4	2
7-	7	6	6	7
Don't know	2	2	-	-
No answer	4	2	1	2

[a] SOURCE: Project Directors.

[b] Five programs showed no tutor-counselors in follow-up.

As shown in Table 59, the average age for most tutor-counselors was between 18 and 21 years. Since these are mainly college students, retention is expectedly low.

In 1969, five programs reported 5 to 10 percent retention from one year to the next, four reported 11 to 30 percent, five from 31 to 50 percent, while two retained 71 to 80 percent of their tutor-counselors and one reported 91 to 100 percent retention. A similar pattern existed in the other two years for which figures are available; there was no relevant data for 1966. See Table 60.

Table 59

Average Age of Tutor-Counselors by Number of Summer Programs

Age	Number of Programs			
	1966	1967	1968	1969
18-19	5	4	7	7
20-21	9	9	12	9
22-23	1	3	1	2
24-or over	1	1	1	2
Don't know, no answer	2	2	1	2
Does not apply (no tutor-counselors)	4	3	-	0

Table 60

Percent of Annual Retention of Tutor-Counselors by Each Summer Program

Percent Retained	Number of Programs		
	1967	1968	1969
0-10	7	5	5
11-20	2	4	2
21-30	-	1	2
31-40	1	3	2
41-50	3	2	3
51-60	-	2	-
61-70	1	-	-
71-80	-	-	2
81-90	1	-	-
91-100	1	2	1
Don't know	2	-	-
No answer	1	3	5
Does not apply	3	-	-

b. Project Directors' Attitudes Toward Tutor-Counselors

Fourteen project directors cited use of host college students as tutor-counselors. Ten directors preferred, whenever possible, to use Upward Bound graduates as tutor-counselors. In the opinion of nine project directors, the optimum ratio of students to tutor-counselors was about one to every eight students. Lesser numbers of project directors indicated ranges of 1 to 5 students, 1 to 7 students, and 1 to 10 students as optimum ratios.

There appeared to have been few changes in the role of the tutor-counselor during the four years of Upward Bound. Six directors did say they had divided the role into two separate positions and five said that tutor-counselors were doing less counseling during recent years since professional counselors had been assigned this task and that tutor-counselors were, therefore, assuming more tutoring responsibilities.

c. Project Directors' Recommendations Concerning Tutor-Counselors

The project directors had a few suggestions for improving the tutor-counselor function: four suggested more extensive training and screening of tutor-counselors, three wanted them used as assistant teachers in Upward Bound classes, and three suggested that there should be closer contact between tutor-counselors and students.

d. Background Data from Tutor-Counselors

The college students who serve as tutor-counselors are expected to be available to help students after classes with homework, tutoring, and study methods, and to discuss and advise them with personal problems. In the majority of the sample projects, they performed both functions.

Of the 55 tutor-counselors interviewed, 30 were male and 25 female. Ethnicity was divided between 27 black and 25 white tutor-counselors, including 4 with Spanish surnames, 1 American Indian, and 2 others. Most were 19-20 (24), or 21-22 (15) years of age. Their educational levels varied from one year of college (11) through college graduate (12), and four tutor-counselors had done graduate work beyond their baccalaureate. They were selected for interview from lists furnished by project directors. An attempt was made to interview two to three tutor-counselors per project.

Nineteen respondents were students at the host college and 16 were former Upward Bound students now attending the host college. The remainder were either non-host college students, college graduates, or had special experience and advanced degrees. For 19 of the tutor-counselors it was the first summer they had worked in Upward Bound, 10 had worked in the program for two summers, and the remainder had worked for longer periods, including follow-up programs. See Tables 61, 62, 63, and 64.

Table 61

Age of Tutor-Counselors

Age	Number
Total	55
8 or less	18
19-20	24
21-22	15
23-24	5
25 or over	7

Table 62

Highest Grade Completed by Tutor-Counselors

Grade	Number
Total	55
1 year college	11
2 years college	17
3 years college	11
College graduate	12
Graduate work	4

Table 63

Educational Status of Teacher-Counselors

Status	Number
Total	55
Host college student	19
Upward Bound student at host	16
Non-host college student	6
Upward Bound student not at host	3
Other: Graduate of non-host college	4
Host college graduate	4
Special experience; advanced degrees	1
No answer	2

Table 64

Number of Programs in Which Tutor-Counselors Had Participated

Programs	Number
Total	55
1969 summer only	19
1968 follow-up and 1969 summer	3
1968 and 1969 summer	10
Both summers and follow-up	9
Two summers; one follow-up	6
Three summers; one follow-up	1
Three summers; two follow-ups	4
three follow-ups	2
three summers only	2
No answer	2

e. Tutor-Counselors' Perception of Their Job

The majority (35) of those interviewed felt that it was important that tutor-counselors work in both summer and follow-up programs, primarily because staff turnover in other areas was, in their opinion, too rapid for program continuity.

Half of the tutor-counselors interviewed (27) felt that age of the tutor-counselor was not important and that the present range was satisfactory. They listed maturity, interest in students, and personal experience as the factors which should govern the selection of tutor-counselors. The other respondents favored hiring tutor-counselors who were younger than the staff, but at least three or four years older than the Upward Bound students. They favored this age differential because students look up to someone who is older and more knowledgeable, and because tutor-counselors who are 21 or 22 can both understand student problems because they are close enough in age and can handle discipline problems because they are slightly older.

Seventeen tutor-counselors felt that the optimum ratio of tutor-counselors to students is 1 to every 7 students; 16 preferred 1 to every 5 students; 12 stated 1 to 10 was best; 5 wanted 1 to 8; and 5 said they didn't know.

f. Perception of Changes in Type of Students Recruited

Of the 55 tutor-counselors interviewed, 15 commented that they had perceived no change in the type of student recruited for Upward Bound during the years. However, an equal number did find there had been a change in the students in terms of more positive attitudes and more involvement; eight mentioned that newer students seemed more intelligent and studious. Some respondents who were new to the program had no opinion. These comments support similar observations by project directors. See Table 65.

Table 65

Tutor-Counselors' Perception of Changes in Type of Students Recruited

Changes	Responses	Respondents
Total	51	41
Students now have better attitudes, are more involved	15	15
No change from previous years	15	15
Students are more intelligent, studious, cooperative	8	8
Students seem less involved, less motivated	4	4
Other	9	9

g. Perception of Program Impact on Host Universities

As indicated in Table 66, most tutor-counselors felt that the program had had limited impact on the host universities; 10 stated that the host university showed a changed attitude toward black students and 6 observed that social activities were more integrated. Again, several were too new to the program to have made any observation.

Table 66

Tutor-Counselors' Perception of Program Impact on Host Universities

Impact	Responses	Respondents
Total	48	44
Change in attitude toward blacks; awareness of black students' needs; more efforts to help culturally deprived	14	10
Social activities more integrated	6	6
Changes in curriculum, requirements, minority group enrollment	4	4
No change from previous years	20	20
Other	4	4

One example of impact was stated as follows:

> White students in the Upward Bound program and the white faculty have had their views and attitudes changed... They in turn communicate their changed views about blacks to other white students and other white faculty...

Only two or three tutor-counselors had heard of any adverse comments concerning Upward Bound from host university personnel or students, such as that Upward Bound students were "dummies," or were blamed when there was trouble or vandalism on campus.

h. Perception of Program Weaknesses

The tutor-counselors felt that there were staff difficulties both because of the shortage of tutor-counselors and because of communications problems between tutor-counselors and other staff members. They also felt that other program weaknesses resulted from limited funds, lack of planning, too much free time for students, and lack of space and adequate facilities. The need for more community and parental involvement in Upward Bound programs was also mentioned. About half of the tutor-counselors agreed that the administration, particularly the project directors, were responsive to student needs and were attempting to deal with student problems.

i. Recommendations

Suggestions by tutor-counselors fell into two categories: improvement of their own role and function, and improvement in the program in general.

Regarding their own role as tutor-counselors, replies included a need to redefine the position to make it more responsive to student needs, more autonomous, and to separate the tutoring and counseling functions. In many schools, the tutor-counselors appeared unsure about the precise role they were expected to fulfill. Although they clearly understood the difference between tutoring (helping with homework, study skills, etc.) and counseling (helping students with personal problems), many indicated that they were able to fulfill only one of these roles at a particular time.

The following statements are examples of some suggested changes in the tutor-counselor role:

> Upward Bound is limited in the community because it is so limited in "cultural attractions." Make it possible to take students into other areas often...when I was in the program we had different things to do.
>
> Make it possible to initiate programs without checking with the main office. Make the position more self-reliant, not frustrated by higher authority or inhibited by a shortage of money.

> I would separate the two functions. Use tutors in areas where qualified; counselors should devote all their time to this work. It is needed.

Among the suggestions for program improvements were more rules and discipline for students; scheduling changes which would encompass more free time periods, more variety in courses and activities, and a more flexible curriculum design; (on the other hand, there were also suggestions for a more structured or organized curriculum and program design which might include course requirements and more student supervision); recruitment of a more creative, innovative staff; development of avenues for more student-staff communication; and more community and parent involvement. See Table 67.

Table 67

Tutor-Counselors' Recommendations

Recommendation	Responses	Respondents
Total	64	54
More structured curriculum; minimum course requirements; supervision; rules	11	9
More flexible, open-ended curriculum; variety in activities; more free time in schedule	14	12
Change role of tutor-counselors to make job more responsive to student needs; separate tutoring and counseling functions	18	13
Closer student-staff relations; more creative staff	9	9
More community-parent involvement	7	6
No changes needed	5	5

The few favorable comments on follow-up programs measured success in terms of continuing communication between staff and Upward Bound students and a close staff-student relationship which sometimes developed during this period.

j. Conclusion

Apparently, tutor-counselors feel more strongly than other staff members that the students need some outside supervision and organization. Although they also see the need for flexibility, tutor-counselors apparently perceive a desire in Upward Bound students for structured and planned use of the time spent in the program. As one respondent suggested:

> We need a structure. Students and staff are at loose ends...The students we have are conditioned into a life style that requires an authority figure. They need a structure with care and loving.

Despite their problems, the tutor-counselors appear to play a vital role in most programs. They are in closest contact with student problems and function most effectively with small groups of five to seven students. In their opinion a division of responsibility, allowing tutor-counselors to concentrate either on tutoring or on counseling, would increase the effectiveness of their role.

6. Upward Bound Students

a. Bridge Students

Interviews with Bridge students were held at all the 22 host universities and colleges visited. Bridge students are those who are completing the Upward Bound program. They have been in the program for one or two years; this final summer, usually in residence at the host institution, is for most of them a trial run in adjustment to the college experience.

Approximately six to eight students were present at each of the group interview sessions conducted by the field analysts. None of the Upward Bound staff were in attendance, and all the students were assured that their remarks would be held in strictest confidence. The analysts felt that the large majority of the groups were uninhibited and spoke freely and earnestly.

1) Perception of Recruitment

An overwhelming majority of students indicated they were first introduced to the program by their high school guidance counselors. For the most part, it appears that guidance counselors are well informed about Upward Bound, but students from at least two high schools found it necessary to "hound" their high school counselors into making inquiries about the program. The remaining students came in contact with Upward Bound through teachers and friends who had had some connection with the program in the past.

The recruiting process usually consisted of a formal application and one interview with an Upward Bound project director or a high school guidance counselor. The majority of students, five to seven in each group, believed that selections were based on financial need and underachievements reflected in low grades. They saw themselves as high-potential, low achievers from a poverty background. It was their consensus that other students were turned down by Upward Bound because they lacked a genuine financial need and some claimed that classmates whose grades were exceedingly low had not been allowed to participate in the Upward Bound program. A low quota for female enrollment was cited as the reason for rejection of many qualified female students.

2) Perception of Host Campus Attitude Toward Participants

Many groups of Bridge students reported that they had not been completely accepted on the host campuses. The pervasive attitude toward the Upward Bound students was often one of hostility, caused by the fact that they were from a different social stratum, were culturally different, and, often, visibly black. The students complained that they were often made the scapegoats for any trouble that occurred on the campus.

3) Perception of Attitude of Family, Friends, and Community Toward Program

The attitude of the family toward the Upward Bound program was generally seen as positive. However, many families were reportedly suspicious of the program at first. Some of these families saw Upward Bound as a "government handout"; others complained about the program removing their children from the home, in many cases for the first time. The child's absence caused both financial and emotional problems.

Some white families did not favor the idea of a completely integrated program. Students noted, however, that as the families began to perceive postive changes in their children, they developed a more supportive attitude toward the program.

Only in rare instances did students experience a radical change in their patterns of friendship. Although these students formed many new and important friendships within the program, previous friendships were also maintained.

For the most part, the students' communities were totally unaware of the Upward Bound program. In a few black communities, the participants in these integrated programs were labeled "Uncle Toms."

4) Perception of Impact on Feeder High Schools

The students were unanimous in their preference for the Upward Bound program over the regular high school curriculum. After Upward Bound teachers showed that learning could be fun, students experienced some difficulties in returning to what they termed the dull routine of high school. Either they found the work too easy, or they were put off by the teaching methods. Many of the students complained about the irrelevancy of the subjects studied in high school. They felt that Upward Bound instructors stressed relevant issues, using newspapers and current paperbacks in their lessons. Students also preferred Upward Bound because of the smaller class size and the personal contact with the teachers.

Most of the students said they they would like to see improvements in their high school's teaching staff. They also asked for a general loosening up of the rules and regulations pertaining to such items as dress and student activities.

Students felt that Upward Bound had had very little impact on their high schools because of the small number of students from each individual feeder school. However, a few students reported that they became more active in student government as a result of their Upward Bound experience which would suggest that the program did have some impact on the schools; albeit an indirect one.

5) Student Expectations and Perception of Benefits

Almost all Bridge students agreed that they had benefited tremendously as a result of their participation in the program. Many students said that they had expected to have "lots of fun and a groovy social life" in the summer program. Others were fascinated by the idea of being paid to attend school. However, after a few weeks they had found out that the program involved hard work, but most agreed that the learning process was more enjoyable than in high school. The students felt that as a result of their Upward Bound experience they will adapt more easily to college life. Among the many social gains cited were the development of a better understanding and tolerance of other people; the dissolution of color boundaries among students; and the unlocking of introverted students who were now finding it easier to relate to the world around them. Most of the students expressed confidence in their increased ability to do academic work; many felt that Upward Bound broadened their cultural horizons. Overall, students saw themselves as changed, more aware, "turned on," and more appreciative of their own qualities. Other more tangible benefits mentioned were help in making decisions about college, gaining admission to college, assistance with acquiring financial aid for college, and the opportunity to be on campus and become familiar with college life.

6) College Aspirations

Approximately 90 percent of the Bridge students interviewed has been admitted and intended to go on to college, whereas less than 50 percent of the students had had college as a goal before starting in the program. In most cases, the students had had a choice of several colleges and were satisfied with their final decision. The majority of these students were to attend four-year liberal arts colleges, while a few students had plans to attend two-year colleges, and other postsecondary schools. Aspirations with respect to college were usually high. At least 25 percent of the students said they intended to go on to graduate school after college.

Upward Bound guidance counselors were cited as instrumental in getting the students into college. The services they had performed included recommending schools, obtaining applications for admission and financial aid, and writing letters of recommendation. With a few exceptions, students had sufficient financial aid for college. This aid was in the form of loans, grants, and scholarships; NDEA financing was cited most often.

7) Perception of Program Weaknesses

Although almost all Bridge students found the guidance counselors most helpful, they could not agree on any particular personnel who they considered least helpful. Mentioned most of all were the project directors. Many students seem to have found them too conservative and "stuck in their ways" and felt that there was a lack of communication between themselves and the directors.

The Bridge groups interviewed suggested that the predominant reason for students dropping out of the Upward Bound program was financial need. Many dropouts fround it necessary to work during the summer months. Other reasons mentioned were marriage, family difficulties, and a lack of serious intent about higher education. It was suggested that an increase in the stipend and improved screening procedure might reduce the number of dropouts.

8) Perception of Follow-up Program

Many students reported that the follow-up program was extremely valuable. The reunions at the college with friends made during the summer were enjoyable, as well as stimulating. Varied educational offerings, trips, and excursions made up the program. These were supplemented by counseling and assistance in applying for college admission. The tutoring sessions were a great help to them in their academic work during the year. Most of the students requested an increase in activities during this follow-up period.

Not all programs had this range of activities; the rural programs were restricted by the distances students lived from the campus, which precluded more than one reunion and limited contact in general.

Many students had difficulty in filling the time between the end of the summer program and the start of high school. They usually became very bored because most of their friends back home were still working at summer jobs, and it was too late for them to find work. A number of students, therefore, suggested extending the summer program through this period.

9) Recommendations

Students were in unanimous agreement that the program should be continued, but with a few suggested changes. Their major change request was to have the summer program lengthened by at least two weeks. Other desired changes were a broader cultural program, including more trips to points of historical interest, theaters, museums, and varied entertainments.

Another reported request was for an increase in the number of college credit courses during the summer program.

Most of the graduating Upward Bound students left the incoming students with this word of advice, "be open to people and new experiences, and be ready to work hard." All students in the Bridge program reaffirmed their faith in Upward Bound by giving a unanimous positive response to the question, "Would you like to work for Upward Bound in the future?"

b. Junior and Senior Upward Bound Students

In addition to interviewing the Bridge groups, field analysts conducted interviews with the first- and second-year program participants in an effort to collect some comparative data. These were selected randomly by field analysts from lists of names of students supplied to them. The same schedule of questions was used, but questions not relevant to the experiences of the younger students were eliminated.

1) Recruitment

While most of the Bridge students had learned about the program from their high school guidance counselors, a large number of the newer students found out about the program through friends and relatives. In fact, several of the students interviewed had brothers and sisters who had participated in the program.

Criteria for the selection of students appeared to be changing. Bridge students usually had some academic deficiencies, while those younger groups described themselves as good students with B averages. One boy claimed that he had the highest PSAT scores in his high school.

In contrast with the Bridge groups, many of these students believed that they had been chosen for the program for academic success in addition to financial need.

2) Perception of Host Campus Attitude Toward Participants

Friction between the host campus and Upward Bound appeared to be diminishing. The newer students, compared with the Bridge students, reported fewer unfavorable incidents while living on the college campuses during the summer. Several students mentioned attempts made by the Upward Bound staff to ameliorate racial hostility toward the program. For example, at one southern university an intramural sports program was established with great success.

3) Perception of Program Benefits

Juniors and seniors have apparently reaped many of the same benefits as the Bridge students. These included better social and racial relations, increased motivation for academic success, and a familiarity with college life. Similarly, in response to the question about changes they would like to see take place in the summer program, the first- and second-year students opted for the extension of the summer program and an increase in the number of cultural activities.

4) College Aspirations

Almost all of the first- and second-year students interviewed claimed they had had intentions of going to college both before and after starting the program. It is interesting to note that, compared with the Bridge students, younger students more often cited college as an initial goal. This may reflect the greater academic success of these students. On the other hand, it may be the result of inspirational contact with the Bridge students who are on the threshold of college admission.

5) Most Helpful People

It was impossible to generalize about which people offered the most help to the Bridge students. All were helpful to some degree, however, a majority of the younger students agreed that the tutor-counselors and older Upward Bound students were invaluable in helping them adjust to Upward Bound life. This point is emphasized in the following experience, described by an Upward Bound senior at a midwestern university:

> Last summer I wasn't interested in college or Upward Bound either. One night I got real mad and packed my bag and started out the door; but one of the counselors blocked it so I couldn't get out. He made me sit down and talk it out for about three hours. Ever since then I can't stand to hear a word against Upward Bound or college either.

Responses to the remaining questions such as impact of Upward Bound on high schools and communities, comparison of Upward Bound with high school, etc., were similar to the responses of the Bridge students.

7. Innovative and Creative Educational Activities

The program offerings in the projects visited offered extraordinary diversity, not only in terms of the curriculum but also in the selection of staff. Often students were involved in the selection of teaching and counseling staff. It was felt by the project directors that the students' knowledge of and experience with teachers and counselors in their high schools would result in pulling together staff which would understand and work with them most effectively.

An unusual amount of experimentation has been going on with curriculum construction, and projects have changed their curricula as they have learned more clearly what the participants want and need. Some of the innovation in this area is based on the total curriculum approach, but in a larger measure, it is the result of the creativity of individual teachers or combinations of groups of teachers working together. To cite all of these innovations would be impossible in this section, but some outstanding ones are presented here.

Several projects offer a "cafeteria" approach to curriculum. This is represented by an unusually large number of course offerings from among which a student can make a selection of such possibilities as college course work, remedial activities, drama, different kinds of workshops, lectures,and handicrafts, to mention but a few. In some instances, he is required to take specific subjects that it is thought he needs to promote academic proficiency, and in other instances, he can attend, on a free choice basis, as many as he is capable of absorbing in a day.

A number of projects have "special interest" groups in addition to standard course offerings in academics. This permits participants to select areas of interest that they would like to pursue, such as dance, drama, poetry writing, music, black history, arts and crafts, play production, etc. The interest groups are structured when a number of students request particular ones and instructors are found to sponsor them.

A large number of the projects offer college courses for credit, thereby enabling bridge students who complete these courses to enter college in advanced standing. This is similar to the "advanced placement" programs offered in better high schools.

Extended biological and ecological field trips for a weekend or a week are presented by a few of the projects. Students camp out with their instructors and are able to observe, firsthand, natural phenomena, to collect specimens, and to record and synthesize what they have learned. At the same time, other instruction in the basic tool subjects of reading and writing goes on, using the stimuli and material of the field trips as subject matter.

A number of projects offer courses of current events based on the materials flowing from mass media rather than textual materials. This enables students to come to grips with current problems, examine and understand the use of media, and relate the events to historical change taking place around them.

Small classes are usually to be found in most projects and these are often employed in conjunction with team teaching activities whereby two or three teachers work with the class and focus individual attention on the participants.

One of the projects utilized guest speakers in seminar types of classes. Prominent persons in their fields and political figures were invited to address the participants and answer questions. Another project employed visiting professors, each of whom taught a class for two weeks. This permitted students to gain exposure to different styles of teaching and different points of view.

The production of a full-length play became the structure for a series of course offerings in one project. Participants wrote the play, acted out the roles, designed scenery, and mounted the production. This resulted in a meaningful and relevant fusion of academic and skill activities for students and permitted them to enjoy, and take pride in, the outcome.

Some extraordinary and creative teaching was observed at several of the projects visited. These are too numerous to cite here, but some outstanding examples should be mentioned.

One mathematics teacher taught trigonometry to his students while teaching them sailing. They learned how to read azimuths, how to utilize a sextant, how to calculate distances while they were gaining knowledge about tides, weather, and safe sailing.

One English teacher, utilizing the production of a newspaper as his material for instruction, was able to teach basic English skills and journalism at the same time.

Another gifted teacher taught mathematical principles in the process of assisting participants in building an operating hovercraft.

Participants in Upward Bound were not just passive subject or course takers. In some projects, students were actively involved in administrative decision making and in the selection of and the planning of curricula. A number of projects had unique systems of student government, replete with courts and their own formulated rules and regulations governing student behavior and discipline. These structures were not only used to insure student cooperation and to maintain standards of discipline, but also to teach participants some basic understanding of the democratic legal process, and the need for deliberation before making decisions or pronouncing judgments.

Finally, the use of tutor-couselors should be mentioned as an interesting and highly innovative feature of the Upward Bound programs. Tutor-counselors, as described in an earlier section of this chapter, are young men and women, usually former Upward Bound graduates now enrolled in college, who assist the participants on a personal basis. They generally live with the Upward Bound participants in the dormitories and they are assigned a small group whose personal problems and academic weaknesses they attend to. It is felt that not only do they serve as models for the participants to emulate, often getting them through identity crises, but they also, in a large measure, are responsible for the high level of motivation and desire for college admission exhibited by the participants.

8. Admissions and Financial Aids Officers

Each sample school visited was asked to have members of the staff from the admissions and financial aid offices supply information relating their activities to Upward Bound. The data, the least useful that the field analysts gathered, were generally incomplete because it was difficult in mid-summer, and on short notice, to reach personnel who could provide the needed information. But even given these conditions, there are some themes which do run through the responses to these questionnaires which were incompletely filled out by a little more than three-fourths of the offices.

Admissions and financial aid officers were asked to comment on changes in availability and impact of Federal student aid programs over the past five years. With the exception of a few institutions in the southeast, all seemed to feel that the changes had been positive. The few argued that the programs raised hopes high but did not provide the vast amount of funds needed.

When asked to comment about financial aid to the host college for Upward Bound students, all agreed that Upward Bound enhanced admission chances and also served as a significant recommendation for a full financial aid package. Many institutions feared the admission and financial aid situation would "become more difficult because of increases in tuition, and the fact that National Defense Education Act (NDEA) and other Federal aid funds have been cut back..."

Several institutions also mentioned steadily increasing difficulties in procuring matching money for EOG awards, citing limitations on NDEA and private scholarship monies as the central problem. In several instances this meant some badly needed EOG monies went unspent because they could not be matched.

Admissions and financial aid officers were asked specifically "Do you think Upward Bound has been successful to date?" None replied negatively, but there were several complaints that the number of colleges actively involved in recruiting and funding Upward Bound students was too limited. Positive statements included the fact that Upward Bound "brought more kids to our attention and vice-versa. Kids in Upward Bound are better prepared and have more sophistication in regard to college."

Many respondents noted that a growing number of admissions officers at non-Upward Bound colleges were learning about Upward Bound but that, in general, professional attitudes, such as the continued battle cry of "maintaining academic standards," were quite slow to change.

It was surprising to find that few of the colleges keep separate records for Upward Bound students who are admitted to these schools. This means that information on retention is unavailable for many of the sample schools. In addition, since financial aid officers did not know which college enrollees had been Upward Bound students, they could not determine to whom to give extra funds when any which could be utilized for this group became available.

Much of the data gathered in these interviewers was incorporated into the observations in Chapter IX which discusses the Upward Bound student in college.

9. On-Site Visits

During the five years of Upward Bound's existence, hundreds of site visits had been made to the various projects. Unless the project was having difficulties the aim was to have two visits per year, one during the summer and one during the academic year or follow-up period.

It was impossible to examine the hundreds of site-visit reports in the Upward Bound files during the short period of time available to this study staff. Therefore, it was decided to examine only the reports on the projects in the sample.

The official site visits made regularly since the inception of Upward Bound four years ago were made chiefly by college instructors or former project directors who had spent an average of two days observing, examining records, and talking to project directors, staff, and students. The site visitors were generally oriented in their observations by a series of guideline questions evolved by the contract agency. Their reports became a large portion of input for judging the relative strengths and weaknesses of a project and determining whether it needed special attention or pressure to change. For example, one program was having difficulty with relations between its project director and its Public Advisory Council which threatened to disrupt the project. This was reported by an observer and, as a result, a meaningful amount of communication and continuous visits by Washington staff members were initiated in an effort to ameliorate the strained relationships.

It must be pointed out that the quality of the site-visit reports was generally uneven. Some were excellent, explicit, and insightful; others were vague and full of generalities. There was significant disagreement on a single program which was considered one of the "typical" projects. The following reports from two site visitors during the *same* follow-up period said:

> The follow-up is a well coordinated job involving visits by the project director and a reading teacher and part-time staff arrangements with the high school and other non-high school persons interested in the program. It is viewed as a quite adequate undertaking involving weekly reunions at the high schools tutoring and day-to-day contact with students.
>
> The follow-up is poor and lacks sufficient contact between the project director and the Upward Bound students. Although Upward Bound clubs exist and meet weekly for tutoring and counseling, they are isolated and there is no contact between clubs, and the students and staff at the several high schools.

These site visits, really monitoring operations, are extremely valuable to the Upward Bound program, since they enable the headquarters staff in Washington to keep informed of project operations in all the areas. The quality of the site visits could be improved, as recommended elsewhere in this report, by a more judicious selection of personnel making the visits. The site visits should also be augmented, especially with weak projects, by follow-up procedures involving joint planning with project directors, technical assistance,and sustained observation of projects.

VII. BENEFIT-COST ANALYSIS OF THE UPWARD BOUND PROGRAM

A. Introduction

The purpose of this study is to do a benefit-cost analysis of the Upward Bound program. The author believes that results presented represent the best that can be done at present, considering the limitations of data and time. The reader interested in the numerical results may wish to refer immediately to Tables 73, 74, and 75 for results from the individual's viewpoint, and to Tables 77, 78 and 79 for results from the government's viewpoint.

Benefit-cost analysis first came into general use in the 1930s in connection with examining alternative water resource development projects proposed to be built by the Federal government. Since that time, the method has been extended to many other fields. The essence of the benefit-cost analysis method consists in (a) determining logically the categories of costs of a project and the categories of benefits that might flow from it; (b) collection of data on the costs and benefits and assignment, insofar as possible, of a dollar value to these costs and benefits; and (c) comparison of the difference between benefits and costs, or of the benefit-cost ratios, for alternative projects. The present study does not attempt part (c), for it does not make a benefit-cost study of alternative ways of achieving the goals of the Upward Bound program. The best that the study can do, then, is to indicate whether the benefits appear to exceed the costs, and by how much. Until alternative programs are similarly examined, it will be impossible to say whether this program represents the best expenditure of the taxpayer's money.

There have been three previous benefit-cost analyses of the Upward Bound program. Judith Segal (1967) did a preliminary analysis. Because only the scantiest data were available on the actual success of the program in getting students into college and keeping them there, her analysis was based on some broad general assumptions about the probable success of the Upward Bound program. Her results, using a social (rather than individual) viewpoint, indicated benefit-cost ratios ranging from 1.65 to 2.77 when discounted at 3 percent and from .94 to 1.74 when discounted at 5 percent.

Freeman and Bailey (1968) did their study primarily for the purpose of illustrating the application of benefit-cost analysis to educational programs. They used the Upward Bound program at Bowdoin College as a source of cost data, with no attempt to assert that these costs were typical. Because those in the Bowdoin College Upward Bound program were still in high school, they made assumptions about the percentages who would enroll in college. They conclude that "the Upward Bound program (at least in its present sex-race composition) is not feasible on strict economic efficiency grounds if the appropriate interest rate is deemed to be 8 percent or greater. If the appropriate discount rate is thought to be 5 percent (or lower), the program might be economically feasible; but this depends on its success in encouraging participants to enroll in and complete a four year college course."

Probably the best designed study done to date appears in Resource Management Corporation Report UR-051 (1969). They have used an excellent approach to the problem of defining a control group with which to compare the Upward Bound group by assuming that older siblings would be the same in all respects except exposure to the Upward Bound program. They indicate considerably higher benefit-cost ratios than either of the previous studies: 4.8 at 5 percent, 3.4 at 8 percent, and 2.6 at 10 percent. Unfortunately, the report in this publication is so brief that it is impossible to completely understand the procedures used or to question some of the implied assumptions.

The present study will use many of the same methods used in the earlier studies, but it represents a substantial improvement in data quality and treatment.

B. A General Description of The Study

Any attempt to do a cost-benefit analysis of a social program is beset with the necessity for so many guesses and approximations that results can be, at best, only tentative. This study will point out the areas in which such guesses and approximations have been necessary, but the magnitude of the errors involved is usually unknown, so that it is difficult to know whether or not the errors known to be on one side counterbalance those known to be on the other side. In addition, there are a number of benefits and costs that are not measureable in dollars, and therefore cannot be brought explicitly into the analysis. These extremely important caveats should be kept in mind in reading this analysis.

The first important task in a cost-benefit analysis is to determine the point of view from which it is to be done. The point of view affects the costs and benefits to be measured and the manner in which they will be treated. There are at least four points of view which were considered in the formulation of this analysis. Two of them have been adopted.

1. Benefits and Costs to the Individual

This viewpoint is an important one. If the individual does not perceive the potential benefits to him to be greater than the costs, he will not wish to engage in the program. For this reason, this study includes estimates of the benefits and costs of the Upward Bound program from the viewpoint of the individual.

2. Costs and Benefits to Society as a Whole

This would seem to be an appropriate point of view from which to regard a social program supported by money collected from the taxpayers as a whole. The previous studies cited have purported to use this viewpoint, although it is not clear (particularly in the very briefly reported RMC study) whether they have been consistent in this viewpoint. While this is a useful viewpoint, it does not bring into focus the interests of the government in a specific way. The differences between this viewpoint and the one used in this study are minor, but not unimportant.

3. Costs and Benefits to the Government Viewed as a Profit-Maximizing Firm

This is a rather narrow viewpoint, but one which could be adopted by a bureaucrat whose only concern was the income and expenditure of the government. From this viewpoint, for example, the benefits of the Upward Bound program would be such things as increased tax payments by former Upward Bound students as a result of increased incomes resulting from the program, and reduced payments for unemployment compensation and welfare to the former Upward Bound students. The costs would only be the government's direct expenditures on the Upward Bound program.

While it seems appropriate to consider the government's viewpoint in this analysis, since we are concerned with alternative ways in which the government may spend its scarce resources, this seems entirely too restricted a viewpoint.

4. Benefits and Costs to the Government Thought of as a Firm With a Social Conscience

It seems clear that the government, as the servant of the people, must be concerned not only about its own income and expenditures, but the effect of those expenditures upon its constituency. Such a government would properly be concerned that as a result of its expenditures the income of some of its citizens was increased, and that this increased income was the result of increased production in the economy as a whole. This viewpoint is very close to that of society as a whole, but there are important differences. For example, from the viewpoint of society as a whole, an expenditure on welfare is neither a cost nor a benefit. It is a transfer payment, a method of distributing wealth from one group of its citizens to another. But the government must consider the Upward Bound program as one of many programs competing for the resources available to government, and thus a decrease in welfare payments resulting from the program is a benefit of the program from the government's viewpoint. This has been adopted as an appropriate viewpoint from which to consider the Upward Bound program, and benefits and costs from this viewpoint will be presented in addition to the benefits and costs from the viewpoint of the individual.

C. The Sample

1. Control Group

An attempt to analyze rigorously an experimental program must involve comparison with a control group, either defined or implied. Ideally, such a control group is like the experimental group in all ways except exposure to the experimental program. Analysis of differences in results between experimental and control groups leads to an evaluation of the benefits of the experimental program.

One of the difficulties in analysis of the results of social programs is the definition of a satisfactory control group. Ideally, one would divide the population eligible for the experimental program into two groups on a random basis, and expose only one of the groups to the experimental program. However, a belief that the program will prove successful is essential to its success, and if those in the control group believe this they will generally resist exclusion from the experimental program. One possibility, which was used in the Segal and the Freeman and Bailey studies, is to use population averages as an implied control group. However, the experimental group in the Upward Bound program is by no means representative of the population as a whole, nor any subgroup of the population on which general data are available. Thus it is that the RMC report, in capitalizing on the existence of data on older siblings, has found what appears to be, under the circumstances, the best approach to a control group. If they had used only older siblings of the same sex (which they did not), and if they had controlled for the fact that some students have more older siblings than others (which they apparently did not, although this cannot be determined definitely from the report), they would have defined a group whose members, paired with Upward Bound students would be of the same sex and race, would have been reared in the same families and in the same community environment, would perhaps have on the average the same intelligence, and would have, in most cases, attended the same schools. For a real-life situation it is hard to conceive of a better control group.

2. Data Sources

The Upward Bound program is also fortunate in having a computerized data bank containing information on individuals in the program. The bank was initiated in early 1968, but information on students who were in the program earlier has been gathered where possible and added to the bank. The information is updated even after the student has left the program and gone on to work or further education. This bank contained all of the information needed on individual students except data on the educational attainment of their siblings. These data come from a special study done at Syracuse University by Hunt and Hardt (1967). They obtained data from almost all of the Upward Bound students who were enrolled in the program at the time of their study (approximately 21,000) by means of a self-administered questionnaire. Important for our purposes was the student's report of the number of his older siblings of each sex and their educational attainment as of the summer of 1966. Applied Data Research, Inc. combined the Syracuse data bank with the Upward Bound data bank by matching student identification numbers, and then supplied a computer tape containing all Upward Bound students appearing in both data banks who enrolled during the period June 1966 through August 1968, and who have older siblings of the same sex. All information from both the Upward Bound and Syracuse data banks was on the tape, with the exception of the student's name and street address. Table 68 contains information on the composition of the sample and comparison with the actual mix of students in Upward Bound in summer 1968. This actual mix can be considered representative of the mix throughout the program. It appears from the table that the sample used in this study is substantially representative of the actual sex and race composition of the Upward Bound program. From this tape the Upward Bound students and their older siblings were put into categories by sex, race, and educational attainment. Each Upward Bound student was made to have the equivalent of only one older sibling of the same sex. For example, if a white female Upward Bound student had an older sister who had dropped out of high school and another who had completed high school, one-half person was added to the sibling category "white, female, dropped out of high school," and one-half was added to the sibling category, "white, female graduated from high school." In this way, account was taken of all older siblings but siblings from large families do not exert extra influence on the sample.

Table 68

The Sample

Total Upward Bound master file records of students who started Upward Bound 6-66 through 8-68		23,223
Total Syracuse records		20,990
Total matched IDs		16,052
Records not processed:		
No older siblings of same sex	7,426	
Race missing	347	
High school state missing	146	
Amount of education missing	802	
Conflict in education data	6	
Upward Bound enrollment dates missing	10	
Student dead or disappeard	79	8,816
Records processed:		7,236

Category	Percent Present	
	In Sample	In Upward Bound[a]
Males	47.5	49.4
Females	52.5	50.6
Whites	32.0	29.5
Nonwhites		
Afro-American		54.3
Spanish-American[b]		9.2
All other		7.0
Total nonwhite	68.0	70.5
White males	15.7	14.8
White females	16.2	14.7
Nonwhite males	31.7	34.6
Nonwhite females	36.4	35.9

[a] Percentages based on 24,725 Upward Bound students in summer 1968.

[b] Spanish-Americans were classed as nonwhite for purposes of this study because of similar lifetime incomes. See text.

3. Biases

What biases might be introduced into the sample by using older siblings as a control group? First, there is the fact that it excludes all students who do not have an older sibling of the same sex. This will tend, then,to exclude students from small families, and it is possible that these students would exhibit superior performance because of the additional parental attention they get. Second, it excludes Upward Bound students from families so disorganized that the student really doesn't know how much education his older siblings have obtained. The bias here would be the opposite of the one above. Third, it excludes students because data on them was not both in the Upward Bound master files and in the Syracuse files. There is no way of knowing what biases, if any, are introduced because of this, but it has been assumed that those omitted are omitted in a random fashion, so that no bias is introduced. Aside from the above sample problems one could question the assumptions that the older siblings are of the same race, socioeconomic status, have the same family and community influences operating, and have the same intelligence as their Upward Bound siblings. Of these, it seems likely that only one is apt to be biased in a particular direction. It may well be that the Upward Bound students are, on the average, more intelligent than their older siblings simply because they are a selected group. Students similar in all other respects except that they were not as intelligent as their older siblings might never have been selected for the program. To the extent this effect operates, and it could be an important one, benefits will be overstated.

Forty-five percent of the 16,052 students who appeared both in the Upward Bound master file and the Syracuse file had one or more older siblings of the same sex. The above discussion would indicate that biases, if introduced,are not apt to be gross, and it seems reasonable to assume that our sample of 7,236 students is a representative sample.

To say that the sample is not biased significantly is to say that it does not differ significantly from the population of all Upward Bound students. This is not to say that there are not significant problems concerned with the use of older siblings as a control group. Two of these problems deserve mention here. The first has to do with the fact that data on educational attainment of older siblings was obtained by Hunt and Hardt (1967) through a self-administered questionnaire. The fact that some students may not know the educational attainment of their older siblings and will guess, or may be tempted to lie about it, probably introduces a bias, because since success in education is culturally defined as "good," students who are guessing or lying would probably tend to overstate their older siblings' education. If this is true, differences in educational attainment between Upward Bound students and their siblings will be understated, and the benefits of the Upward Bound program will be understated.

The second bias will tend to operate in the opposite direction. Like the previous one, the bias probably exists, but there is no way of determining the extent to which it is operating. The bias has to do with the fact that the older siblings did or did not go on to college from one to several years before their Upward Bound siblings. College policies with regard to admission of disadvantaged students, particularly those whose high school records or entrance examinations are not up to the usual standards, have changed rapidly in the last few years. It is therefore distinctly possible that some of the older siblings who did not attend college would have done so had they been of college entrance age today. The effect of this bias will be to make the benefits (lifetime income differentials) of the program appear larger than they would otherwise be, but there is no way of knowing how great this error is.

4. Classification and Use of Data

Each of the 7,236 Upward Bound students was classified by sex, race, and current educational attainment. For purposes of this report, Spanish-Americans were classified as nonwhite. No racial implications are intended, but only a recognition that incomes of both Puerto Ricans and Mexican-Americans are more like incomes of Negroes than of whites.

Current educational attainment was obtained by careful analysis of student data on current educational status, academic standing, reason for leaving Upward Bound program, and reason for leaving college. There is room for ambiguity in determining this, because of the way the data system is set up. (For example, if the data record shows that the student is known not to be in school, and that he dropped out of the Upward Bound program for personal reasons, there is no way of knowing how far he actually went in school. It was assumed that he had dropped out of high school.) However, where there was ambiguity, the assumptions made were, it is believed, reasonable ones.

Only older siblings of the same sex as the Upward Bound students were considered. The sex and race of Upward Bound students and siblings are the same. Educational attainment of siblings is straightforward from the data.

Table 69 contains information on the actual educational attainment of Upward Bound students (as of the date of recording information on an individual in the data bank), and of siblings (as of the summer of 1966). Study of this table indicates that Upward Bound students have already gone on to college in much greater numbers than their older siblings, and this difference can be attributed to the success of the Upward Bound program. However, present educational attainment is not the important thing. What is important is how far these students (and their siblings) will ultimately go in school. Since income data are only available in broad categories (1-3 years high school, 4 years

Table 69

Actual Present Educational Attainment of Upward Bound Students and Siblings of the Same Sex (in percents)

Category	Upward Bound Students	Siblings of Same Sex
White Males		
Dropped out of high school	8.0	28.1
Still attending high school	15.4	6.7
Completed high school, not in college	26.5	36.7
1-3 years higher education, not attending	1.5	6.3
1-2 years junior college, still attending	11.5	-
Some business or technical training	-	6.0
1-3 years college, still attending	37.1	11.0
Completed college	-	5.2
White Females		
Dropped out of high school	7.6	23.4
Still attending high school	12.3	6.3
Completed high school, not in college	29.2	44.3
1-3 years higher education, not attending	1.0	5.3
1-2 years junior college, still attending	14.4	-
Some business or technical training	-	8.1
1-3 years college, still attending	35.5	9.5
Completed college	-	3.1
Nonwhite Males		
Dropped out of high school	6.9	25.4
Still attending high school	9.8	7.5
Completed high school, not in college	18.8	40.1
1-3 years higher education, not attending	0.7	7.2
1-2 years junior college, still attending	12.7	-
Some business or technical training	-	5.2
1-3 years college, still attending	51.1	11.5
Completed college	-	3.1
Nonwhite Females		
Dropped out of high school	4.3	20.7
Still attending high school	7.4	7.1
Completed high school, not in college	22.8	38.4
1-3 years higher education, not attending	1.1	7.2
1-2 years junior college, still attending	15.1	-
Some business or technical training	-	8.2
1-3 years college, still attending	49.3	13.6
Completed college	-	4.8

high school, 1-3 years college, 4 or more years college), assumptions have been made about the ultimate placement of Upward Bound students and their siblings in these categories. In doing this, the findings of the RMC study have been used regarding dropout rates for Upward Bound students and their siblings. The basis for distribution into final educational categories is as follows:

	Assumed Final Educational Attainment (in percents)			
Present Educational Attainment	1-3 H.S.	4 H.S.	1-3 Coll.	4 Coll.
Upward Bound Students				
Dropped out of high school	100.0			
Still attending high school	5.0	15.0	40.0	40.0
Completed high school, not in college		100.0		
1-3 years higher education, not attending			100.0	
1-2 years junior college			70.0	30.0
1-3 years college, still attending			50.0	50.0
Completed 4-year college				100.0
In graduate school				100.0
Siblings - Males				
Dropped out of high school	100.0			
Still attending high school	33.0	42.0	19.0	6.0
Completed high school, not in college		75.0	19.0	6.0
1-3 years higher education, not attending			100.0	
Some business or technical training			100.0	
Still in college			50.0	50.0
Completed college				100.0
Siblings - Females				
Dropped out of high school	100.0			
Still attending high school	25.0	43.0	22.0	10.0
Completed high school, not in college		68.0	22.0	10.0
1-3 years higher education, not attending			100.0	
Some business or technical training			100.0	
Still in college			50.0	50.0
Completed college				100.0

One figure in the above distribution may be questioned. That is the assumption that 100 percent of Upward Bound students who have graduated from high school but not enrolled in college will not go on to college. This is based on the assumption that, as part of the Upward Bound program, a strenuous effort has been made to get the student into a college, and that if this has not been successful it is unlikely that he will ever attend college. This may not be strictly true, and apparently some tentative studies now under way show a tendency for some students to enter military service and then enter college. The number of Upward Bound students who delay entrance to college is probably small, but to the extent that this phenomenon exists this analysis will understate the number attending and completing college, and therefore will tend to understate benefits of the Upward Bound program.

Table 70 gives the estimated final educational attainment of the Upward Bound students in the sample and their siblings.1/ Again, it may be noted that a substantially large percentage of Upward Bound students is estimated to complete college and a substantially lower percentage is estimated to drop out of high school. However, it is also worth noting that the Upward Bound students do not come from families to which higher education is completely foreign. It is estimated here that between 40 percent and 50 percent of their siblings will enroll in college and that more than 10 percent of them will complete college. It is difficult to find directly comparable figures for the population as a whole, but there are some indications. Nationally, 47 percent of students who were juniors in high school in 1966 were enrolled in college in 1968. This figure does not include students who waited for one or more years after high school graduation before attending college, so it is a bit low for use as a comparison. Another comparison shows that 46.6 percent of the population 18 to 21 years of age in 1967 were enrolled in college. The population used here includes members of the Armed Services, a number of whom presumably will complete their military duty and then enroll in college. If the number in the Armed Services were stable, this would not disturb the percentage. Since the number in the Armed Services was expanding during this period, we can assume that the number enrolled in college was somewhat smaller than it would otherwise have been, and that the figure of 46.6 percent is a little low.

Earlier two important sources of bias were pointed out with regard to use of educational attainment of older siblings, one acting to increase it in comparison with Upward Bound students and the other acting to decrease it. Keeping

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1/ Differences in educational attainment between Upward Bound students and their siblings are significant at the .01 level for white females, and at the .001 level for the other three classifications, using a chi-square test.

these two caveats in mind, one is still forced to consider the possibility that the selection process for Upward Bound students did not necessarily locate students who would otherwise have been unlikely to go to college. Instead it is possible that a group slightly below average in likelihood of college attendance has been selected, and that a result of the Upward Bound program has been that they have attended college in considerably greater proportion than the population as a whole.

Table 70

Estimated Final Educational Attainment of Upward Bound Students and Siblings of Same Sex by Race and Sex (in percents)

Category	Upward Bound Students	Siblings of Same Sex
White Males		
1-3 years high school	8.8	30.3
4 years high school	30.4	30.3
1-3 years college	32.7	26.1
4 or more years college	28.1	13.3
White Females		
1-3 years high school	8.3	24.9
4 years high school	32.0	32.9
1-3 years college	32.7	29.3
4 years college	27.0	12.9
Nonwhite Males		
1-3 years high school	7.3	27.9
4 years high school	21.1	33.2
1-3 years college	38.4	27.2
4 years college	33.2	11.7
Nonwhite Females		
1-3 years high school	4.7	22.5
4 years high school	25.1	29.1
1-3 years college	38.2	32.2
4 years college	32.0	16.2

4

D. Discount Rate

It is clear that $1,000 to be received ten years from now is less valuable than $1,000 in hand right now. The fact that this is so reflects the operation of two things. First is the existence of interest as an institution in our financial world. If one has $1,000 now he can invest it or put it in a savings account, and in ten years it will be worth a good deal more than $1,000. But even if there were not the formalized institution of interest almost everyone would rather have the $1,000 now, reflecting the increased utility to the individual of present consumption as against future consumption and the uncertainty of the future receipt of the money. In order to take account of these two factors in an analysis involving flows of money over a long period of time, it is necessary to discount all amounts to a present value, using an appropriate interest rate. Unfortunately, the appropriate interest rate to use is not clear, and also unfortunately, the results of the analysis are quite sensitive to the interest rate used. Because of this, the results have been presented using three different discount rates. The reader may choose the one which seems to him most justified.

A discount rate of 7.5 percent was chosen as representing a rate that approximated the rate at which one might currently invest his money in, say, municipal bonds. One might question whether this is an appropriate rate, when interest rates are higher than they have been in many years. However, there seems to be a good deal of evidence that these rates are not apt to go down rapidly in the near future. Just as we had a long period of low interest rates, so we may well have a long period of high interest rates.

An interest rate of 7.5 percent represents only that reason for discounting that has to do with the existence of the institution of interest. However, given the increased utility to the consumer of current expenditure, and the risk that future income may not actually be realized, it seems appropriate to consider also a discount rate that is higher than one could get with certainty by putting his money into very safe investments. Accordingly, costs and benefits have also been shown discounted at a rate of 10 percent.

Finally, the possibility has been considered that the government may have a utility function that is exactly opposite that of the individual. The government may consider a flow of increased benefits that continues over a long period preferable to realization of all of those benefits immediately. The result would be the addition of a negative discount rate to represent the utility function superimposed upon the normal 7.5 percent interest rate. Accordingly, 5 percent has been chosen as a third discount rate. All results will be given for the three discount rates of 5 percent, 7.5 percent, and 10 percent. With these preliminaries out of the way, we proceed to a discussion of benefits and costs of the Upward Bound program to the individual.

E. Benefits and Costs from the Individual's Viewpoint

First, it is necessary to enumerate the categories of benefits and costs to the individual, and then to attempt to attach dollar values to them. Benefits to the individual might be the following:

1. Increased lifetime income as a result of the Upward Bound program. Of course, the individual will not have use of all of this increased income, for he will be forced to pay income taxes on it. One could either reduce the prospective income by the amount of the taxes, or include the taxes separately as a cost. The latter course was chosen here. This illustrates a problem having to do with benefit-cost ratios. The ratio will be different depending upon whether taxes are shown as a reduced benefit or as a cost, although the dollar difference between benefits and costs will be unaffected. One should keep this in mind when looking at benefit-cost ratios.

2. Stipend received while in the Upward Bound program.

3. Scholarships and grants received while attending college. These also could be looked upon as a benefit or as a decrease in the cost of attending college.

4. Value of the option of obtaining further education, which is passed up if one drops out of high school.

5. Intangible benefits, that is, benefits to which it is difficult or impossible to assign a money value. These might include satisfactions derived from the process of education itself, the opportunity to escape from the ghetto, increased-enjoyment of literature and the arts, and so on. Perhaps important to forward-looking individuals is also the increased opportunity that their children will have for higher education.

Costs to the individual might include the following:

1. Tuition cost of attending college.

2. Extra living costs associated with attending college.

3. Unemployment benefits not received as a result of being more fully employed during his lifetime.

4. Welfare payments not received for the same reason.

5. Additional taxes paid on the additional income received during his lifetime.

6. Foregone earnings while attending high school and college.

7. Intangible costs. This would, among other things, include the loss of leisure time that he would otherwise have while unemployed.

Each of these costs and benefits will be considered individually, describing the source of data, the method of calculation, and the cautions to be observed in interpreting the results.

1. Benefits

a. Lifetime Incomes and Differentials Due to Upward Bound Program

By far the most complicated problem is that of estimating present value of additional lifetime incomes associated with the increased education that results from the Upward Bound program. It is clearly not feasible to wait for 50 years to find out the actual lifetime incomes of those in the program, so it is necessary to attempt to use current cross-sectional data as a substitute for longitudinal data. The best and most recent data are those of the U.S. Bureau of the Census, giving incomes for individuals in 1967 with varying degrees of education at different ages. The assumption is then made that these incomes for different age groups at this point in time represent the incomes for a particular group at different points in time as they reach these ages. This is clearly a tenuous assumption, but the best that is available to us without waiting. A detailed description of the method used in determining lifetime incomes for this study is given in Appendix C.

One of the best things that can be said for this approach is that there is no need to correct for the effects of inflation by converting to constant dollars, since the data are all for the same period of time. To what extent might the present distribution of income represent what will happen over the next 50 years? One thing that is interesting to note is that the streams of income for all levels of education show a characteristic increase for some years, but for the last 10 to 20 years before retirement they show a slow decrease. However, on the basis of everyday experience it seems unlikely that the salary rates of individuals are reduced during this period. Rather, it seems that they probably reach a plateau and tend to stay there. The tailing off observed could be the result of increased sickness as individuals get older, so that they are less able to work full time. Or it may represent the fact that these individuals who are now older are to a great extent obsolescent. Not only did their formal education occur a long time ago, but in recent years (as retirement age approaches) it has not been financially attractive to them to seek retraining. This does not mean that their salaries have been decreased, but rather that they have stayed on a plateau and have not shared in the increases that have come to younger age groups as a result of the expansion of the economy.

Miller (1965) has shown that real incomes in constant dollars are indeed increasing with the passage of time. It appears that this rate of increase has been in the neighborhood of 3 percent per year for a number of years. One may derive this from Miller's figures or, alternatively, from the fact that productivity has increased at approximately this rate for the past 20 years. This means, then, that an estimate of lifetime incomes that does not take this expansion of the economy into account will seriously underestimate. Table 71 shows in four sex-race categories, and for four educational levels, the present value of lifetime income ignoring economic growth. Table 72 gives present values when economic growth at an assumed rate of 3 percent per year is taken into account. Detailed tables (not included in this report) show that when economic growth is taken into account earnings after about age 50 tend to reach a plateau and stay there, as had been postulated above.

Table 71

Value of Lifetime Income Ignoring Economic Growth
by Race and Sex and Different Percents

Category	Total Income	Present Value at 5 Percent	Present Value at 7.5 Percent	Present Value at 10 Percent
White Males				
1-3 years high school	$277,967	$ 97,714	$66,809	$48,918
4 years high school	311,306	109,018	74,094	53,838
1-3 years college	340,308	109,448	70,912	49,119
4 or more years college	435,671	127,711	78,575	51,708
White Females				
1-3 years high school	61,085	21,365	14,724	10,924
4 years high school	78,903	25,116	16,496	11,696
1-3 years college	92,506	28,859	18,740	13,116
4 or more years college	169,363	49,045	30,641	20,654
Nonwhite Males				
1-3 years high school	177,000	64,635	44,750	33,056
4 years high school	204,574	74,322	51,127	37,466
1-3 years college	229,546	76,534	50,209	35,096
4 or more years college	267,122	81,241	50,700	33,745
Nonwhite Females				
1-3 years high school	72,520	26,132	18,169	12,555
4 years high school	88,941	29,035	19,190	13,640
1-3 years college	111,151	35,342	22,990	16,049
4 or more years college	223,121	65,859	42,990	27,693

Table 72

Lifetime Incomes Assuming the Economy Grows 3 Percent Per Year, by Race and Sex

Category	Total Income	Present Value at 5 Percent	Present Value at 7.5 Percent	Present Value at 10 Percent
White Males				
1-3 years high school	$ 634,618	$175,835	$108,981	$73,783
4 years high school	708,456	196,923	121,725	81,983
1-3 years college	802,708	208,847	123,657	79,533
4 years college	1,069,167	258,662	146,149	89,425
White Females				
1-3 years high school	141,657	38,429	23,805	16,215
4 years high school	190,984	47,938	28,332	18,410
1-3 years college	226,530	55,774	32,642	20,984
4 years college	430,125	99,317	56,019	34,684
Nonwhite Males				
1-3 years high school	393,105	113,854	71,810	49,267
4 years high school	453,181	131,519	82,679	56,401
1-3 years college	527,814	143,088	86,146	56,136
4 years college	639,791	161,060	92,593	57,488
Nonwhite Females				
1-3 years high school	164,352	46,241	29,033	19,967
4 years high school	210,981	54,672	32,680	21,387
1-3 years college	267,245	67,673	39,924	25,743
4 years college	556,591	132,123	75,129	46,654

An individual is not concerned with whether the economic growth which he sees reflected in the annual 3 percent rate of growth of the economy is "caused" by his additional education (some may be, but not all of it). He is only interested in the fact that he will share in it. Thus it is appropriate to use estimates of lifetime income that include this factor of the expansion of the economy for estimating individual benefits.

However, there is another factor that must be taken into account. The individual must ask himself whether, realistically, he can expect to earn the incomes which census figures show are associated with increased educational attainments. We know that there is a high correlation between socioeconomic status and amount of education obtained. To an unknown extent, then, the differences in income may be caused not by education, but by effects of nepotism and social connections. In addition, it is undoubtedly true that, on the average, those with more innate ability are likely to obtain more education. Thus we have the problem of trying to decide how much of the income differentials are caused by education and how much by other factors. There is certainly no question that Upward Bound students have, on the average, fewer social connections and less opportunity to profit from nepotism than the average student. Denison (1962) has faced the problem squarely and has used a figure of 60 percent as representing the proportion of income differentials that can reasonably be said to be caused by education. It is very difficult to establish just what the appropriate figure should be here, for when there is joint causality it is often practically impossible to untangle the causes. However, those who would argue that Denison underestimates the value of education must be prepared to reconcile their viewpoints with findings of a number of recent studies showing socioeconomic status as a much more important determinant of school achievement than measures of school effect.[2/] On the other hand, a study by Guthrie, et al. (1969) surveys some recent, and mostly unpublished literature, and concludes that the figure of 60 percent may be a minimum percentage to represent the effect of education. All serious investigators agree that there is, as yet, no sure way to separate the effects of education from those of innate ability, social connections,and other factors. Here, 60 percent of the income differentials has been chosen as representing the minimum which can be ascribed to education. Obviously 100 percent of the differentials represents the maximum that could be ascribed to education, and 80 percent represents an in-between position. Results of the benefit-cost analyses are shown using each of these three percentages, leaving it up to the reader to choose the percentage he feels most correctly represents the income differential attributable to education.

There are some other problems associated with the determination of income differentials. If we are interested in the differentials caused by education, we should presumably be interested in the differentials in earnings, not in income. However, there are no reliable data available since 1960 on earnings. And even these would not tell the whole story, since people can invest earnings and thus get unearned income that come ultimately from the earnings that were associated with education. In any case, since we are concerned with differentials, we can presume that the income differentials will be rather similar to the earnings differentials. This will not be strictly so, for there is more unearned income in the income of the highly educated than in the income of the less educated. The net result is an upward bias to income differentials. However, this is the best we can do. The use of median incomes rather than mean incomes will also help to decrease the discrepancy, although it is hard to say how much.

[2/] See, for example, Coleman (1966), Burkhead (1967), and Husen (1967).

A mortality table has been used to express the probability that a person who is alive at the age of 16 will still be alive at some future age, and this probability has been used in the calculation of future incomes. The mortality tables are by race and sex, but not by educational attainment. Mortality rates for the educated may be lower than for the uneducated (because they have less physically demanding or dangerous jobs, and better medical care), but no mortality tables were available to check that. In any case, like the income figures, present cross-sectional data are being used to represent longitudinal data. One may presume that mortality rates will decrease in the future, but it is difficult to say how much. Because the probability of being alive for the next few years after age 16 is very high for any of the sex-race groups, and because computation of present values puts greater emphasis on benefits and costs in the near future than in the distant future, the possible differences in mortality rates discussed above are probably unimportant.

Some other studies have taken into account the income differentials among the various regions of the country. This study does not do so for two reasons. First, there is no way of knowing the extent to which these differentials will persist into the future. The differentials have been decreasing, and will probably continue to do so. Secondly, the increased mobility of people makes it a rather tenuous assumption that an individual will continue throughout his life to earn his living in the section of the country where he gets his education. This is true of the poorly educated, as the massive migration of rural southern Negroes to the northern cities in recent years shows. It is also true of the educated who change jobs or are transferred to other sections of the country.

Some of the information contained in Tables 71 and 72 deserves more comment. One may note in either table that the total income of a white male high school dropout is roughly equivalent to that of a nonwhite male college graduate. This is a result of several things, the most important of which is differences in kinds of jobs obtained and rates of pay for whites and nonwhites. But there are other important effects. Unemployment of nonwhites, even the college educated, tends to be higher than unemployment of whites. Mortality rates for nonwhites are higher than for whites. And of course the person who completes college has roughly six years of very low earnings while attending school in comparison with the person who drops out of high school. The effect of this last item is particularly apparent when one looks at the present value of lifetime income using the higher discount rates. Since discounting has the effect of putting greater emphasis on the earlier years, the advantage to the white high school dropout over the nonwhite college graduate becomes marked.

Another thing that can be noted from the tables is the fact that lifetime incomes of nonwhite females are consistently higher than incomes of white females. This does not mean that salary rates for nonwhite females are higher on the average than for white females, for they are not. It merely reflects the fact that nonwhite females are considerably more likely to be in the labor force, whereas white females are more likely to withdraw from the labor force and become housewives. The labor force participation rates for 1967 were 45.6 percent for nonwhite females and 36.5 percent for white females.

There is another possible source of upward bias in benefits, that has to do with the possibility that Upward Bound students will, on the average, enroll in colleges of lower quality than the average student enrolls in. Since we have no yardsticks for measuring college quality, there is no way of checking this, but it is very possible that it is so. Colleges of lower quality are more likely to have space available to accommodate additional students (see later comment on this). Thus, average income differentials associated with differences in education may overstate the differentials which Upward Bound students may expect. Again, the possible effect is noted, but no correction is made for it.

Next, we come to a most important qualification. The assumption is made here that the marginal incomes of Upward Bound students will be equal to the present average incomes of people with the same education. This will be true only so long as Upward Bound remains a marginal program. If this program were to enroll a substantial proportion of the disadvantaged and even graduate them from college, the increased supply of graduates would decrease the price they could command, while the decreased supply of untrained labor would increase the price it could command. The assumptions about marginal costs can only be assumed to hold as long as the program continues to operate at or near the margin.

Finally, there is an extremely important caveat having to do with the increased income caused by education. The assumption is made that the colleges will be able to absorb all of the graduates of Upward Bound without displacing any other applicants; in other words, that the colleges have excess capacity. It is difficult to know the extent to which this is so. The best colleges have tremendous competition for the available places, and it seems probable that for every Upward Bound student accepted, some other student must be rejected. If this were true of all colleges, it could be argued that there are no benefits arising from Upward Bound! On the other hand, many of the smaller private colleges have plenty of excess capacity. Many, but not all, public institutions have open enrollment policies and are committed to providing places for all qualified applicants. There is insufficient time to analyze the colleges to which the population of Upward Bound students goes, and the extent to which these colleges have excess capacity, so no correction has been made for this, but it is noted as an important caution.

Having determined present values of lifetime incomes for the four sex-race groups for different levels of education, the next problem is to determine the differential in lifetime income that is attributable to the Upward Bound program. To do this, we note the percentages of Upward Bound students and siblings achieving the various amounts of education, and compute a weighted mean salary for each. The difference between these weighted mean salaries is the differential attributable to the Upward Bound program. For example, the following is the calculation for white males, using the 5 percent discount rate:

Final Educational Attainment	Percent Attaining it		Present Value of Lifetime Income		Weighted Proportion
Upward Bound Students					
1-3 high school	8.8	x	$175,835	=	$ 15,473
4 high school	30.4	x	196,923	=	59,865
1-3 college	32.7	x	208,847	=	68,293
4 college	28.1	x	258,662	=	72,684
Total					$216,315
Older Brothers					
1-3 high school	30.3	x	175,835	=	53,278
4 high school	30.3	x	196,923	=	59,668
1-3 college	26.1	x	208,847	=	54,509
4 college	13.3	x	258,662	=	34,402
Total					$201,857

Present value of lifetime income differential: $216,315-$201,857 = $14,458

This figure ($14,458) may be found in the appropriate column in Table 73. which is one of a set of three tables (73, 74, and 75) giving benefits and costs from the individual's viewpoint.

A word about the limiting ages chosen for computation of lifetime incomes and the age to which present values are computed. Lifetime incomes have been computed from age 16 (the earliest age when a student is apt to drop out of high school for a full-time job, and also the most likely age of entrance into Upward Bound) up to age 65, the usual age for retirement. Income

Table 73

Benefits and Costs From the Individual's Viewpoint at a 5 Percent Discount Rate, by Race and Sex

	White		Nonwhite	
Benefits and Costs	Male	Female	Male	Female
Benefits				
Lifetime income differentials				
at 100 percent	$14,458	$ 9,089	$11,286	$14,517
at 80 percent	11,566	7,271	9,029	11,614
at 60 percent	8,675	5,453	6,772	8,710
Upward Bound stipend	210	209	224	224
Scholarships and grants	1,075	1,061	1,314	1,325
Total benefits				
at 100 percent	15,743	10,359	12,824	16,066
at 80 percent	12,851	8,541	10,567	13,163
at 60 percent	9,960	6,723	8,310	10,259
Costs				
Tuition	354	308	530	366
Extra living cost while in college	249	217	388	259
Additional taxes paid				
at 100 percent	3,615	2,272	2,822	3,629
at 80 percent	2,892	1,818	2,258	2,903
at 60 percent	2,169	1,363	1,693	2,177
Total costs				
at 100 percent	4,218	2,797	3,731	4,254
at 80 percent	3,495	2,343	3,176	3,528
at 60 percent	2,772	1,888	2,611	2,802

Table 74

Benefits and Costs From the Individual's Viewpoint at a 7.5 Percent Discount Rate, by Race and Sex

Benefits and Costs	White Male	White Female	Nonwhite Male	Nonwhite Female
Benefits				
Lifetime income differentials				
at 100 percent	$6,482	$4,803	$4,759	$7,791
at 80 percent	5,186	3,842	3,807	6,233
at 60 percent	3,889	2,882	2,855	4,675
Upward Bound stipend	206	205	219	219
Scholarships and grants	977	965	1,194	1,205
Total benefits				
at 100 percent	7,665	5,973	6,172	9,215
at 80 percent	6,369	5,012	5,220	7,657
at 60 percent	5,072	4,052	4,268	6,099
Costs				
Tuition	320	278	479	330
Extra living cost while in college	226	196	338	234
Additional taxes paid				
at 100 percent	1,621	1,201	1,190	1,948
at 80 percent	1,297	961	952	1,558
at 60 percent	973	721	714	1,169
Total costs				
at 100 percent	2,167	1,675	2,007	2,512
at 80 percent	1,843	1,435	1,769	2,122
at 60 percent	1,519	1,195	1,531	1,733

Table 75

Benefits and Costs From the Individual's Viewpoint at a 10 Percent Discount Rate, by Race and Sex

Benefits and Cost	White Male	White Female	Nonwhite Male	Nonwhite Female
Benefits				
Lifetime income differentials				
at 100 percent	$2,703	$2,747	$1,674	$4,505
at 80 percent	2,162	2,198	1,339	3,604
at 60 percent	1,622	1,648	1,004	2,703
Upward Bound stipend	202	201	214	214
Scholarships and grants	891	879	1,088	1,098
Total benefits				
at 100 percent	3,796	3,827	2,976	5,817
at 80 percent	3,255	3,278	2,641	4,916
at 60 percent	2,715	2,728	2,306	4,015
Costs				
Tuition	294	254	440	303
Extra living costs	205	178	308	213
Additional taxes paid				
at 100 percent	676	687	419	1,126
at 80 percent	541	550	335	901
at 60 percent	406	412	251	676
Total costs				
at 100 percent	1,175	1,119	1,167	1,642
at 80 percent	1,040	982	1,083	1,417
at 60 percent	905	844	999	1,192

continues after age 65, but since it is usually unearned income the amount of it which is caused by education is dubious. In any case, the addition to present value of such minor income so far in the future is very small.

Present values have been computed to age 16, because that is the average age at which the Upward Bound experience begins. This means that all benefits and costs are discounted to the beginning point of the program, which is the decision point at which an individual decides whether to enter it, and the decision point at which the government decides whether or not to offer it.

Starting the series of lifetime incomes at age 16 means that for those still in school incomes are quite small in the early years, while for those who have dropped out of school, incomes are, by comparison much larger. If, instead, the income series had been started at age 22 this would not have been so. In effect, what has been done is to take the cost of foregone income while attending school into account in the lifetime income calculations, thus making it unnecessary to show it explicitly as a cost. This effect of showing such foregone incomes as a decreased benefit instead of as a cost shows again the folly of comparing benefit-cost ratios unless one knows exactly what are included in each.

b. Upward Bound Stipend

From the computer tape containing the records of the 7,236 Upward Bound students, the average number of summer months and the average number of academic year months spent in the Upward Bound program were calculated for each sex-race group. The calculation results are as follows:

	Average Months in Upward Bound Program	
	Summer	Academic Year
White males	3.22	13.06
White females	3.19	13.02
Nonwhite males	3.48	13.45
Nonwhite females	3.48	13.40

Charles Mertens, of Applied Data Research, Inc., states that Upward Bound students received in stipends 10.2 percent of the Federal program dollar in 1966-67, and 12.3 percent in 1967-68. Federal program cost (see later discussion of this) was approximately $405 per summer slot-month and $50 per academic year slot-month. A slot-month represents a program opening for a single student for a month. Thus a summer slot-month cost of $405 means that it costs the government an average of $405 per month per student to operate a summer program. Assuming that stipends were 11.2 percent of these figures, on the average white males received 3.22 x $45.36 + 13.06 x 5.60, or a total of $219. White females received an average of $218, nonwhite males received $233, nonwhite females received $233. These figures were discounted ten months to derive a present value for them.

c. Scholarships and Grants

The scholarships and grants that a student received while in college are also a benefit. (Loans are not, for they must be repaid.) It is possible to obtain from the tape the amount of the scholarships and grants received by an Upward Bound student, if they were recorded. The amount of the scholarships and grants that older siblings may have obtained is not known, and that information is necessary to obtain a differential attributable to the Upward Bound program. However, it is probably true that scholarships and grants received by siblings were minor compared to those received by Upward Bound students, for whom special efforts were made. The assumption was made that older siblings received no scholarships or grants, and it is recognized that this imparts an upward bias to benefits.

Analysis of the tape shows that for over half of the Upward Bound students who went on to college no scholarships or grants were recorded. A study of a small sample of Upward Bound students by Charles Mertens convinces him that virtually all Upward Bound students who went to college received scholarships or grants. Accordingly, the average amount received by those who are recorded as receiving any amount has been determined. The average amounts received were as follows:

Category	Equal Opportunity Grants	Work-Study Grants	Other Grants	Total
White males	$467	$189	$ 83	$739
White females	470	192	86	748
Nonwhite males	499	170	98	767
Nonwhite females	502	156	135	793

These amounts were assumed to be the amounts received during the freshman year, and it was assumed that the student would continue to receive the same amounts during his succeeding years of college (a total of two years if he dropped out, four years if he completed college.) The computation of present value was made by discounting the amounts received as freshmen three years, those received as sophomores four years, etc.

d. Value of the Option of Further Education

Weisbrod (1968) has pointed out the fact that when a student drops out of high school he effectively forecloses the possibility of attending college. If he graduates from high school, even though he does not go on to college immediately, he gains the option of doing so. Since if he exercises this option he can increase his income, the option itself must have some monetary value. Weisbrod even gives a rather complicated formula for obtaining the value of such an option. Unfortunately, the information necessary to obtain a money value for this option is not available. Weisbrod (1965) states that the value of the option is probably not large. In the present case it may be very small because the Upward Bound program has consisted primarily of a strong effort to help students to further education. Thus we can probably assume that Upward Bound students, when they stop their schooling, are rather unlikely to pick it up again later. The value of the option has been assumed to be zero in this study.

e. Intangible Benefits

By their nature, intangible benefits cannot be expressed in dollars. The economist is forced to ignore them in his benefit-cost analyses, even though he admits the existence of them. Some examples of intangible benefits were given earlier.

We proceed now to a consideration of costs to the individual.

2. Costs

a. Tuition

From the point of view of the individual, it is unimportant that the provision of schooling costs a good deal more than the tuition involved. He is concerned only with his personal costs. Thus, there is generally no cost to the individual for a free public high school education. (Actually, studies have shown that there are some real costs associated with free secondary education, but they are relatively minor, and have been ignored in this study.) Tuition at college has been calculated on the basis of average tuitions, since it was not feasible in the time involved to try to find out for each of the colleges that Upward Bound students attended what tuition was charged. In 1968-69 the average tuition charged by public institutions of higher education was $298, and that of private institutions was $1,436.[3] More than two-thirds of the students in the United States attend public institutions, and a weighted average tuition based on this differential attendance pattern is $602. (It is thus assumed that Upward Bound students attend public and private institutions in the same proportions as does the general population of college students.) Assuming that a student starts college at age 18 and completes it at age 22, college costs for the freshman year have been discounted three years, for the sophomore year four years, etc. The same procedure was then used as was used in calculating lifetime income differentials to compute the differential tuition cost of college that is a direct result of the Upward Bound program.

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[3] Digest of Educational Statistics, 1968, p. 95.

b. Extra Living Costs While Attending College

It is assumed that while the student is in high school he is living at home, and there are no extra living costs associated with attending school. When the student attends college, however, there are extra costs involved. If the student lives at home while going to college, the extra costs will be for books, supplies, and transportation to and from school. If he leaves home and lives at the college his transportation costs will be reduced, but he will have the cost of board and room, books, supplies and some transportation. On the other hand, his family will be able to reduce its expenses by the cost of the student's food.

Let us assume that a family can feed a student who lives at home for $1.50 a day. For nine months, they save $400 by having him away at school. A weighted average of room and board costs for 1968-69 is $870,[4] so the difference is $470. Books, supplies, and transportation might cost an additional $190, bringing the total extra living cost to $660. If the student lives at home, his entire additional costs are apt to average $190. If we assume that half of the students live at home while attending college, the average additional living cost is the average of $660 and $190, or $425. These yearly costs were discounted in the same way that tuitions were.

c. Unemployment Payments and Welfare Not Received

There is no doubt that unemployment compensation is a benefit when it is received, and people who are receiving such benefits may often decide that they would rather continue receiving the benefits for the time being than take a job. Similarly, then, a student who is considering undertaking the Upward Bound program in order to increase his earning power must take into account the fact that he will be passing up the opportunity to receive unemployment benefits which otherwise might accrue to him if he did not receive the additional education. The same thing is true of welfare payments which might have been received by the individual or his family if he is unemployed, but might not be if he gets more education. However, it is unnecessary to calculate unemployment or welfare separately for the individual, because the figures we are using for income differentials include receipts from unemployment insurance and from welfare. Thus, when an individual goes from a high school dropout to a college graduate, his increase in income is composed of (among other things) an increase in earnings resulting from more education, and a decrease in unemployment and welfare payments. Because of the inclusion of these payments in income they are not shown separately in Tables 73, 74, and 75.

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[4] Computed from data in Digest of Educational Statistics, 1968.

d. Additional Taxes Paid

Pechman (1969) has shown that in the mid-range of incomes, total Federal, state, and local taxes take about 25 percent of the individual's income. Thus, the tables show an amount for additional taxes paid that is 25 percent of the lifetime differentials shown.

F. Results From the Individual's Viewpoint

Figure 1 presents in graphic form the information in Tables 73, 74, and 75. Pairs of bars represent benefits and costs for each of the four sex-race categories. Each bar is divided into three parts. As indicated in the example, the distance from the baseline to the lowest line on a bar indicates the benefits or costs if one assumes that only 60 percent of the differential in lifetime income is caused by education. This would represent a conservative approach to the analysis of benefits. The distance from the baseline to the top line of a bar represents benefits or costs if one assumes that 100 percent of lifetime income differentials are caused by education. While we do not know how much of the differential is caused by education, it is clear that an assumption of 100 percent leaves nothing for other probable causal factors, and is therefore a limiting and unrealistic figure. The middle line in each bar represents benefits or costs if 80 percent of differences in lifetime incomes are caused by education. It represents a middle ground, and may be the most reasonable figure to look at.

In looking at Figure 1, it is clear that for all groups at all discount rates, regardless of one's assumptions about the percentage of income differentials caused by education, the Upward Bound program is beneficial for the individual. In all cases the present value of benefits received is at least twice the present value of costs to the individual. As far as the individual is concerned, he may feel confident that enrollment in the Upward Bound program will be to his advantage. And this is aside from unmeasured or intangible benefits of the kinds that were discussed earlier.

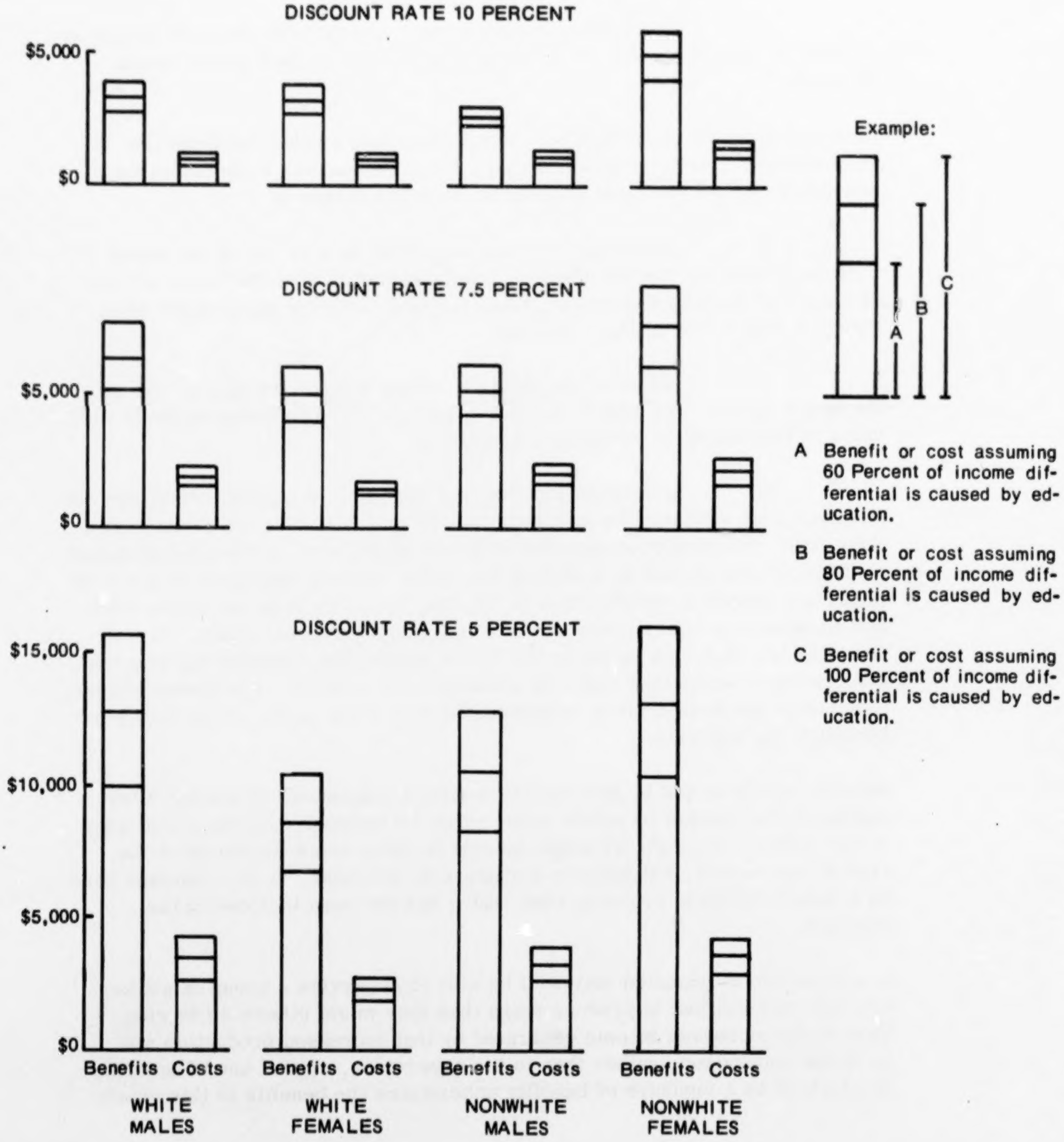
G. Benefits And Costs From The Government's Viewpoint

We turn now to the calculation of benefits and costs from the government's viewpoint. As before, we must consider the categories of costs and benefits involved. It appears reasonable that benefits to the government might be as follows:

1. Increased lifetime income as a result of the Upward Bound program. The government is interested in this increased lifetime income even though it accrues to individuals, both because the welfare of its electorate is important to the government and because the increased income represents increased production, which benefits the economy as a whole. This increased income goes first to the individual, who then transfers part of it to the government in taxes. Both the income which the individual keeps and the taxes he pays are benefits from the government's

FIGURE 1

BENEFITS AND COSTS FROM THE INDIVIDUAL'S VIEWPOINT BY RACE, SEX AND DIFFERENT PERCENTS



DISCOUNT RATE 10 PERCENT

DISCOUNT RATE 7.5 PERCENT

DISCOUNT RATE 5 PERCENT

A Benefit or cost assuming 60 Percent of income differential is caused by education.

B Benefit or cost assuming 80 Percent of income differential is caused by education.

C Benefit or cost assuming 100 Percent of income differential is caused by education.

point of view. They could have been stated separately, but there is no particular reason to do so. In the tables the entire lifetime income increments are shown as benefits, without dissociating them into amount kept by individuals and amount paid in taxes to the government.

2. Decreased unemployment payments by the government as a result of the increased employment of graduates of the Upward Bound program.

Note that from the individual's viewpoint this was a cost, but from the government's viewpoint it is a benefit, for it represents a portion of its scarce resources that may be diverted to other purposes.

3. Decreased welfare payments as a result of increased income of graduates of the Upward Bound program. For the same reason as with unemployment payments, this is a benefit to the government even though it was a cost to the individual.

4. Value of the option to obtain further education. As with the individual analysis, we will assume that for Upward Bound students the value of this option is vanishingly small.

5. Intangible and external benefits. A student who drops out of school may well pass on to his or her children attitudes which discourage them from obtaining education, and it is one of the aims of the Upward Bound program to change this by breaking the cycle. Indeed, this may be the most important benefit of the program in the long run. But it is extremely difficult to make any dollar estimates of this intergenerational effect. In addition, the fact that it is so far in the future means that whatever its size the discounting process may make its present value modest. For these reasons, no attempt has been made to include estimates of the value of this hoped-for benefit in the analysis.

Another benefit might be decreased juvenile delinquency. If we had information on the amount by which crime might be reduced, and the social cost of the crime prevented, we might be able to make some estimates of the size of this benefit, but suitable statistics do not exist. It is mentioned here as a benefit which is probably real, but it has not been included in the analysis.

A person who is educated may well be able to supervise a group of workers who are thus enabled to produce more than they would otherwise be able. Part of the increased income generated by that increased production will go to the supervised, rather than to the supervisor, so that use of incomes of educated as a measure of benefits understates the benefits to this extent.

Here again, no attempt has been made to include this external benefit in the analysis.

A student with more education will probably have greater participation in civic and philanthropic activities, as well as in democratic political processes. These, too, are important benefits from the viewpoint of the government, but there is no adequate way of quantifying them.

There may well be other benefits which are not readily quantifiable, but the ones given are illustrative of these benefits.

From the viewpoint here being considered, the following may be thought of as costs:

1. The direct cost of the Upward Bound program to the Federal government. This includes the money paid to colleges for operating the programs and for stipends to students. It also includes the central administrative costs of the Upward Bound program.

2. Costs of the Upward Bound program to participating colleges. Colleges were required to share part of the costs, and these must be considered in our analysis.

3. Costs of educating the Upward Bound students. The assumption is made that the Upward Bound program is mainly effective in that it encourages students to go on to further education, so the cost of that additional education must be included in our analysis. From the individual's viewpoint, tuition cost was the important thing, but from the government's viewpoint, all of the resources that are devoted to educating these individuals are important, for the resources could otherwise have been diverted to other uses.

4. Extra living cost of students while in school. This extra living cost is a cost from the government's viewpoint just as it is from the student's viewpoint, for if not used in this way, it could have been spent by individuals in other productive ways.

5. Foregone income. Note that, as with the analysis from the individual's viewpoint, the calculation of incomes starting at age 16 results in foregone income being included as a reduction in lifetime income differentials.

6. Possible intangible costs. One such possible cost would be the additional social cost of sustaining the rest of the ghetto if, by education, we remove from it some of its potential future leaders.

1. Benefits

a. Increased Lifetime Incomes

The individual was not interested in whether or not his increased education "caused" his increased income, but only in the extent to which he would be able to share in this increased income as a result of the education. For this reason, the analysis from the individual's viewpoint included the increased income that could be expected as a result of the expansion of the economy. The government's viewpoint is a very different one. Because it is interested in whether or not the Upward Bound program is an economically sound one, its primary interest in increased lifetime incomes is in the extent to which the Upward Bound program causes them. It was mentioned earlier that this analysis can only be considered valid so long as the Upward Bound program remains a marginal program. Because of the fact that it is a marginal program, it is unreasonable to assume that it makes any significant contribution to the expansion of the economy. For this reason, it appears that the calculation of lifetime income differentials from the government's viewpoint should use the lifetime income series that were calculated ignoring the 3 percent annual expansion of the economy.

This frame of reference, that benefits of government programs should be measured by the improvement they cause rather than the improvement with which they are associated, may be illustrated by a hypothetical example. Let us suppose that over a period of time there are no contributions to growth of gross national product from education, technological innovations, or indeed from anything except increases in the size of the working force. Since the working force is increasing at a rate of around 1.5 percent per year, the GNP would also expand at this same rate. Let us suppose that the amount of education of the working force has been increasing over this period although we know (but the government does not) that this increased education is not affecting the GNP at all. It would be easy for a government analyst to note the increases in education and to see that they are associated with growth in the GNP. He could then confuse correlation with causation and assume that a government investment in an educational program would bring benefits in increased GNP.

The situation in this study is analogous. The person who disagrees with this point of view could substitute the figures for lifetime income increments from Tables 73, 74, and 75 (which included 3 percent economic growth per year) for those in Tables 77, 78, and 79, but the author believes this to be clearly incorrect. On the other hand, it can be argued that some economic growth is caused by education and that Upward Bound is an educational program. This might suggest the use of a figure such as that given by Denison (1962) of 0.64 percent growth per year caused by education. Incomes computed using such a figure have been tried here in one specific case to see how the results would be affected. For the case where it is assumed that 80 percent of increased incomes associated with education are caused by education, at a discount rate of 5 percent, the lifetime income differentials are as follows:

	White Males	White Females	Nonwhite Males	Nonwhite Females
Assuming no economic growth	$4,254	$3,342	$3,221	$5,523
Assuming economic growth of 0.64 percent per year	$5,324	$3,921	$4,096	$6,441

The increase in benefits is approximately 20 percent, but the conclusions that one would draw from Table 77 are substantially unchanged: benefits outweigh costs for white males and nonwhite females, benefits are slightly greater than costs for white females, and costs outweigh benefits for nonwhite males. It seems probable that using this lifetime income series on the other cases would not substantially affect the other conclusions either.

The income differentials have been calculated at 60 percent, 80 percent, and 100 percent of observed amounts as they were for the individual, but for a somewhat different reason. The individual was concerned with the probability that he would actually receive the increased income. The government is concerned with the extent to which increased incomes are caused by additional education. Increased incomes received as a result of social connections or nepotism, even if Upward Bound graduates received them, could not be thought of as having been caused by the Upward Bound program or the additional education received as a result of Upward Bound. As with the analysis from the individual's viewpoint, benefits have been shown assuming that 60 percent of income differentials are caused by education (a conservative estimate of benefits), that 80 percent are caused by education (very possibly a reasonable middle ground), and that 100 percent of differentials are caused by education (a limiting value that is clearly too high, although we do not know by how much).

With the exception of the portion dealing with the effect of the expansion of the economy, all of the discussion of lifetime income differentials given earlier in connection with the individual's viewpoint applies equally here.

b. Decreased Unemployment Benefits

As was mentioned earlier, the interest of the government with respect to decreased unemployment payments is quite different than that of the individual. To the government, not having to pay unemployment benefits that it would otherwise have had to pay is clearly a benefit, for this releases scarce resources that may be employed in other ways. For this reason, it is not possible to say from the government's viewpoint, as we did with the individual, that reductions in unemployment payments are automatically taken account of in the income series used. Changes in income as a result of education consist (among other things) of an increase in income caused by education and a decrease in unemployment payments from the government. The increase in income caused by education is a benefit from the government's viewpoint because it reflects an increase in production. In order to measure it more accurately, we should pull out the effect of the reduced unemployment payments, so that the increased income caused by education may be examined more by itself. The net effect of this is that we should increase the benefits by the amount of the estimated reduction in unemployment payments in order to more accurately portray the effect of the increase in production as reflected in increased income caused by education.

But, from the government's point of view the decrease in unemployment payments is in itself a benefit, for the reasons given above. Thus, we should add to the benefits of increased production as calculated above, the decrease in unemployment payments. The net effect of both of these calculations, then, is to take the benefits as given from the income series and add to them twice the estimated reduction in unemployment benefits, but this does not constitute double counting of benefits.

Calculation of the present value of these benefits involves a number of assumptions, as have the other calculations. It is very possible that high school dropouts do not receive very much unemployment compensation anyway, so that a calculation based on the average unemployment compensation received may be artifically high. However, not all Upward Bound students would have been high school dropouts (note the educational accomplishments of their siblings), so this argument does not have the force it might otherwise have. On the other hand, calculation of unemployment benefits based on the assumption that they will not increase at all in the future is almost patently wrong, and will result in an understatement of their amount. Yet, because of the scanty data available, the estimates are made on just these bases: that the student, had he not been in Upward Bound, would have received an average amount of unemployment compensation; and that there will be no increase in the level of unemployment benefits in the future. The best that can be said here is that these two effects work in opposite directions.

For all workers in 1967, 3.8 percent were unemployed. The average benefit received was $41.25 per week for 11.4 weeks, or a total of

\$470.25.[5] From unemployment rates we can derive the following estimates:

	Percent Unemployment			
Category	Total	White Collar	Blue Collar	Difference
White male	2.7 [5]	1.6	3.1	1.5
White female	4.6 [5]	2.7	5.3	2.6
Nonwhite male	6.0 [5]	3.5	6.9	3.4
Nonwhite female	9.1 [5]	5.3	10.5	5.2
Total	3.8 [5]	2.2 [5]	4.4[5]	—

(Footnoted figures above are published. The others are derived from them by a proportionate method which also takes into account the relative numbers of white collar and blue collar workers.) This table now gives expected percent unemployment for certain segments of the labor force. In order to be useful for our purposes it must be adjusted for labor force participation rates, which are as follows:

White males	77.4 percent
White females	36.5 percent
Nonwhite males	73.3 percent
Nonwhite females	45.6 percent

The adjusted differences in unemployment rates between blue collar and white collar workers are then:

White males	1.2 percent
White females	0.9 percent
Nonwhite males	2.5 percent
Nonwhite females	2.4 percent

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[5] Data from Statistical Abstract of the United States, 1968.

Now let us make the heroic assumpton that all people in the working force with no college have blue collar jobs and all those with at least some college education have white collar jobs. Then for each white male who, as a result of Upward Bound gets some college , his chances of unemployment are reduced 1.2 percent, and 1.2 percent of $470.25 is $5.64 per year. On this basis the reductions for all groups are as follows:

White males	$ 5.64 per year
White females	4.23 per year
Nonwhite males	11.76 per year
Nonwhite females	11.29 per year

If all Upward Bound students got some college and all of their siblings got none, then the government would pay out $5.64 less per white male Upward Bound student. The present value of $5.64 a year for 48 years (age 18 to 65) is $102 at 5 percent, $73 at 7.5 percent, and $56 at 10 percent. However, 60.8 percent of white male Upward Bound students have some college, and 39.4 percent of their siblings have. The difference is 21.4 percent. The cost of foregone unemployment benefits attributable to Upward Bound then is 21.4 percent of $102 (at 5 percent discount rate), or $22.

c. Decreased Welfare Payments

For exactly the same reasons as given for unemployment payments, the amount of welfare payments not received by the Upward Bound students (or their families) during their lifetimes must be calculated. And as before, the present value of this amount must be used to boost the figure for income increments caused by education and also shown separately as a benefit.

Any attempt to forecast the future of welfare payments is filled with danger. The President has before Congress a proposal for a complete change in the welfare program. It is impossible to forecast what the future may hold, and so in this study it has been assumed that welfare payments will stay at approximately the present levels. Even after making this assumption there is little left to go on. While there is Federal help for state welfare programs, each state sets its own eligibility qualifications and level of support. For lack of any better way of doing it, the relative levels of unemployment and welfare payments have been observed. In 1967 total payments in the United States for unemployment compensation were $2,181,000,000. In that same year the following were the total welfare payments for persons other than the aged and disabled:

Aid to Families with Dependent Children	$2,280,000,000
Medical assistance to the needy	2,511,000,000
General assistance	389,000,000 6/
	$5,180,000,000

Welfare payments were then 237 percent of unemployment payments. The tables show an amount for decreased welfare payments that is 237 percent of the amount shown for decreased unemployment payments. As with unemployment payments, this figure assumes that the students, if they had not been in Upward Bound, would have received an average amount of welfare payments (or that their families would have), and that the level of welfare payments and the pattern of their distribution will not change. As before, perhaps the best thing we can say about these two assumptions is that they are biased in opposite directions. Fortunately, the total amount involved in both unemployment and welfare payments is relatively small, so that different assumptions would not change the overall results very much.

2. Costs

a. Costs of the Program to the Government

The total costs of the Upward Bound program to the government are relatively clear. It is known what was appropriated and (with somewhat less certainty) what was actually spent. It is a more difficult problem to connect these costs to the benefits (increased lifetime incomes of individuals) in a meaningful way. The costs of programs operated by different institutions have varied greatly. The time allowed for this cost-benefit analysis does not make it possible to do a careful analysis of costs, for there are various time-consuming problems involved in assembling and checking them. For the same reason, it does not seem feasible to try to assign costs of the program by sex or race or section of the country.

This study relies on cost data provided by Charles Mertens and Charles Cole of Applied Data Research, Inc. and by Oliver Moles of the Office of Economic Opportunity, for the period July 1966 to August 1968, the period covered by this study. Mertens has been intimately connected with Upward Bound since its inception. Cole is in charge of the Upward Bound data banks.

6/ Data from Statistical Abstract of the United States, 1968.

Data were obtained from them on the government's program cost by summer programs and academic year programs, and the number of "slots" for each. (A slot is a space in a program occupied by a student.) From Mr. Moles data were obtained on administrative costs, including payments made to Educational Projects, Inc. and to Educational Associates, Inc. for administering the program. This information was then used to calculate the total governmental cost per summer slot-month, and per academic year slot-month. Actually, since programs were funded to apply both to the summer and academic year portions under the same grant, Cole and Mertens have made the reasonable assumption that two-thirds of total costs were incurred during the summer months. The assumption was made that central administrative costs remain relatively constant throughout the year, and they have thus allocated one-fourth to summer and three-fourths to academic year.

The cost data, and the calculations that result in a cost per summer slot-month and per academic year slot-month are shown in Table 76. The total cost per slot-year is \$822 + \$543 = \$1365, which is about \$80 less than the figure used in the RMC report. These figures were then applied to the average number of months spent by each sex-race group in the summer program and the academic year program, which were shown earlier in connection with calculation of the amount of the stipend. The total government cost per student is then as follows:

White males	\$2,107
White females	2,092
Nonwhite males	2,237
Nonwhite females	2,234

The costs per student were then discounted ten months to bring them to a present value at age 16 (assumed to be the start of the program).

Note that from the government's viewpoint stipends are merely part of its program cost.

b. Costs to Colleges Operating Upward Bound Programs

Originally, the colleges operating the Upward Bound programs were required to contribute in money, personnel, or otherwise ten percent of the cost of the Upward Bound program. In mid-1968 this was increased to twenty percent. Cole and Mertens state that they believe the average college contribution during the period of this study was 13.3 percent of the government's

Table 76

Upward Bound Program and Administrative Costs

(Costs in millions of dollars)

Period	Program Cost	Admin. Cost	Total Cost	Slots
Summer 1966	$16.80	$.25	$17.05	20,334
Summer 1967	18.80	.28	19.08	22,443
Summer 1968	19.60	.30 (est.)	19.90	25,368
Total			56.03	68,145
Academic year				
1966-67	8.40	.75	9.15	19,000
1967-68	9.40	.84	10.24	18,184
1968-69	9.80	.90 (est.)	10.70	18,200
Total			30.09	55,384

Cost per summer slot: $56,030,000 ÷ 68,145 = $822
Cost per summer slot-month: $822 ÷ 2 = $411

Cost per academic year slot: $30,090,000 ÷ 55,384 = $543
Cost per academic year slot-month: $543 ÷ 9 = $60

program costs (excluding OEO administrative costs). This makes the college contribution approximately $54 per summer slot-month, and $7.40 per academic year slot-month, and these figures have been used in the calculations. Here also the figures were discounted ten months to get a present value.

c. Costs of Education

From the government's viewpoint, the entire cost of the additional education obtained by students as a result of being in the Upward Bound program is a cost, for if the money were not used in this way it could be used elsewhere. This would be true whether the schools the students attend are public or private.

Finding the actual cost of education for these students would be an impossible task. Even if we know how much is spent on the average per student in the school districts and colleges they attend, we would not know that this is the amount expended on these individuals. The idea of getting an average cost by state was considered, but the doubtful increased accuracy would not be worth the additional time necessary. Costs were therefore based on national averages.

The assumption was made that the marginal costs of educating these students are equal to the average costs of educating all students. This is not a completely reasonable assumption, for if the program is truly marginal, an additional student or two will usually not change the cost of operating a school more than a small amount. However, there are no data on which to base an estimate of the marginal cost, and average cost is used without further apology.

First, the cost of high school education should be considered. In 1967-68 the current cost of education in public elementary and secondary schools was $623 per pupil in average daily attendance. This average figure masks wide differences among states (from $346 in Mississippi to $982 in New York), and among school districts within the states.[7] Even as an average it is too low, for the figure includes both elementary and high schools, and high schools usually cost more per pupil to operate than elementary schools. There are no good figures on how much more, though, because most school districts don't keep their books in such a way that they themselves can know. An average figure of $623 was used here with the realization that it is probably a low estimate of the actual cost. Since the starting date for this analysis is assumed to be the start of the junior year of high school, high school costs for those with one to three years of high school were estimated as one year at $623, discounted one year. For those who completed high school the cost is for two years, discounted one and two years.

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[7] Data from Digest of Educational Statistics, 1968.

Computation of an average current college cost per student is more complicated. First is the matter of definition. It was decided that the cost of education is best represented by "Educational and General Expense" less "Organized Research." In counting students, only degree-credit enrollment was counted.

The second problem is that statistics on higher education are notoriously behind the times. The latest expenditure data available are for 1963-64. In order to make a projection, instructional cost per student was calculated from 1951-52 through 1963-64.[8] The increase in cost very closely approaches a straight line, so that one can confidently project from the data an average cost per student in 1967-68 of $1,470. For students with one to three years of college two years of high school costs were assigned, discounted one and two years, and two years of college costs (at $1,470 per year) discounted three and four years. Those who graduate from college are assigned two years of high school costs discounted one and two years, and four years of college costs discounted three, four, five, and six years.

d. Extra Living Cost While in College

This is a cost from the government's point of view, just as it was from the individual's. Computation of it was explained earlier.

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[8] Data from Digest of Educational Statistics, 1968.

H. Results From The Government's Viewpoint

The results of the analysis from the government's viewpoint are shown in dollars in Tables 77, 78, and 79, and in graphic form in Figure 2. The tables contain two columns that Tables 73, 74, and 75 did not. One is a column for what might be thought of as the typical Upward Bound student. A weighted average of the figures for the four sex-race categories was taken, using as weights the percentage of each category actually in the Upward Bound program, as shown in Table 68. The table, then, gives a measure of the performance of the Upward Bound program as a whole as well as showing the effect on each of the sex-race categories. The last column is designed to give an idea of the amounts of money involved. It shows what the total costs and benefits would be if the program enrolled 25,000 students a year.

It can be seen that the results from the government's viewpoint are not as uniformly good as they are from the individual's viewpoint. If we use the figures which assume that 80 percent of increased income is caused by increased education, we see that at a discount rate of 5 percent the benefits outweigh the costs for white males and nonwhite females, it is about a tossup for white females, and costs outweigh benefits for nonwhite males. For the actual mix of students in Upward Bound, at the 5 percent discount rate, benefits outweigh costs so long as we believe that at least 80 percent of the income differentials associated with education are caused by it.

At higher discount rates the picture is bleaker. At 7.5 percent, benefits outweigh costs only for nonwhite females, and then only if we assume that increased incomes are almost 100 percent caused by increased education. For the actual Upward Bound mix, costs clearly outweigh benefits. In fact, just the government's costs are almost equal to total benefits at 80 percent.

At a discount rate of 10 percent benefits become almost nil for nonwhite males, and close to that for white males. For the actual mix of students in Upward Bound, costs run three or four times benefits. Cost to the government alone is roughly twice total benefits.

There are two main reasons why this is so. As Table 71 shows, the present values of lifetime incomes are extremely sensitive to the discount rate. Although each of the four sex-race groups earns more with more education, the effect of discounting the value of future income is a powerful one. At 7.5 percent discount rate, both white males and nonwhite males have a lifetime income with lower present value if they have some college than if they have none. At a discount rate of 10 percent, a nonwhite male is distinctly better off if he neve

Table 77

Benefits and Costs From Government's Viewpoint At a 5 Percent Discount Rate by Race and Sex

	Per Upward Bound Student					Total dollars per Year @ $25,000 Upward Bound/year
	White		Nonwhite		Actual	
Benefits and Costs	Male	Female	Male	Female	Upward Bound Mix	
Benefits						
Lifetime income differentials:						
at 100 percent	$5,299	$4,167	$3,967	$6,866	$5,235	$130,875,000
at 80 percent	4,254	3,342	3,221	5,523	4,219	105,475,000
at 60 percent	3,209	2,518	2,475	4,180	3,203	80,075,000
Decreased unemployment payments	22	13	70	45	46	1,150,000
Decreased welfare payments	52	31	166	107	108	2,700,000
Total benefits:						
at 100 percent	5,373	4,211	4,203	7,018	5,389	134,725,000
at 80 percent	4,328	3,386	3,457	5,675	4,373	109,325,000
at 60 percent	3,283	2,562	2,711	4,332	3,357	83,925,000
Costs						
Upward Bound cost to government (incl. stipends)	2,021	2,007	2,146	2,143	2,106	52,650,000
Upward Bound cost to colleges	260	257	275	275	267	6,675,000
Cost of education	984	846	1,410	998	1,116	27,900,000
Extra living costs while in school	249	217	388	259	296	7,400,000
Total Costs	3,514	3,327	4,219	3,675	3,785	94,625,000

Table 78

Benefits and Costs From Government's Viewpoint At a 7.5 Percent Discount Rate by Race and Sex

	Per Upward Bound Student					
	White		Nonwhite		Actual	Total dollars per Year @ $25,000
Benefits and Costs	Male	Female	Male	Female	Upward Bound Mix	Upward Bound/Year
Benefits						
Lifetime income differentials:						
at 100 percent	$2,075	$2,399	$1,287	$3,997	$2,540	$63,500,000
at 80 percent	1,671	1,926	1,063	3,219	2,054	51,350,000
at 60 percent	1,266	1,453	839	2,441	1,568	39,200,000
Decreased unemployment payments	16	10	50	32	33	825,000
Decreased welfare payments	38	24	118	76	77	1,925,000
Total benefits:						
at 100 percent	2,129	2,433	1,455	4,105	2,650	66,250,000
at 80 percent	1,725	1,960	1,231	3,327	2,164	54,100,000
at 60 percent	1,320	1,487	1,007	2,549	1,678	41,950,000
Costs						
Upward Bound costs to government (incl. stipends)	1,980	1,966	2,102	2,090	2,063	51,575,000
Upward Bound costs to colleges	255	252	270	270	262	6,550,000
Cost of education	898	768	1,282	906	1,015	25,375,000
Extra living costs while in school	226	196	338	234	263	6,575,000
Total Costs	3,359	3,182	3,992	3,509	3,603	90,075,000

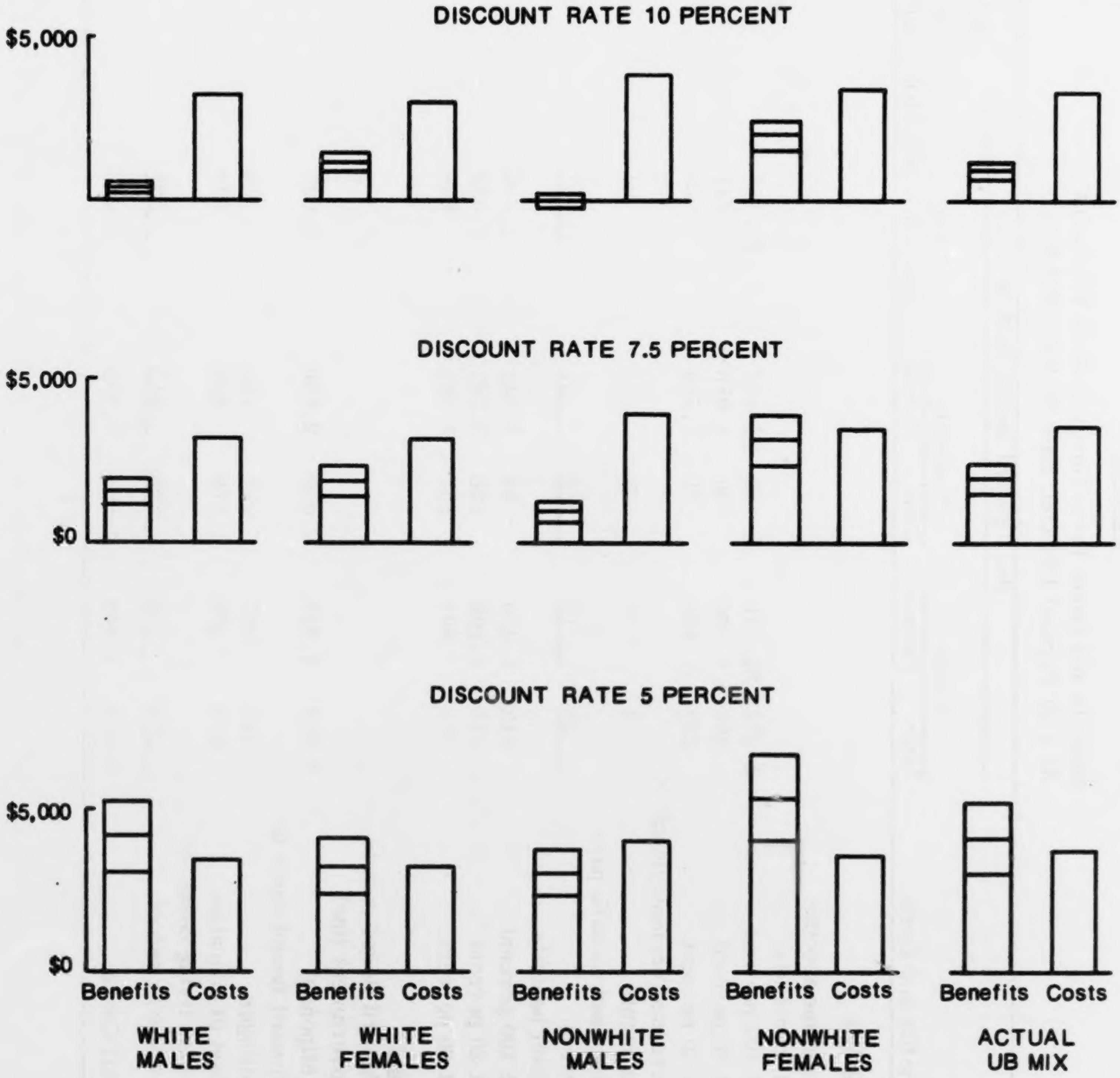
Table 79

Benefits and Costs From Government's Viewpoint At a 10 Percent Discount Rate by Race and Sex

Benefits and Costs	Per Upward Bound Student					Total dollars per Year @ $25,000 Upward Bound/Year
	White		Nonwhite		Actual Upward Bound Mix	
	Male	Female	Male	Female		
Benefits						
Lifetime income differentials:						
at 100 percent	$ 472	$1,451	$ -32	$2,462	$1,155	$28,875,000
at 80 percent	386	1,166	00	1,986	941	23,500,000
at 60 percent	299	880	31	1,510	725	18,125,000
Decreased unemployment payments	12	7	38	24	24	600,000
Decreased welfare payments	28	17	88	57	57	1,425,000
Total benefits:						
at 100 percent	512	1,475	94	2,543	1,236	30,900,000
at 80 percent	426	1,190	126	2,067	1,022	25,525,000
at 60 percent	339	904	157	1,591	806	20,150,000
Costs						
Upward Bound cost to government (incl. stipends)	1,939	1,925	2,059	2,056	2,020	50,500,000
Upward Bound costs to colleges	249	247	264	264	259	6,475,000
Cost of education	819	699	1,170	836	929	23,225,000
Extra living costs while in school	205	178	308	213	240	6,000,000
Total Costs	3,212	3,049	3,801	3,369	3,448	86,200,000

FIGURE 2

BENEFITS AND COSTS FROM THE GOVERNMENT'S VIEWPOINT
BY RACE, SEX AND DIFFERENT PERCENTS



attends college (present value of lifetime income $37,466) than if he graduates from college (present value of lifetime income $33,745)! This is reflecting the fact that the incomes are computed from age 16 to 65. The discounting process puts considerably more weight on the early years, when the college student is in school and earning a minimal amount. Put another way, for Negro males the present value of the opportunity cost of foregone income (at a discount rate of 10 percent) while attending college exceeds the present value of the additional income later received.

On the other hand, most of the costs which have been accounted for take place in the first two years, and all of them take place in the first six years. One might conclude from this, then, that if one were willing to use a discount rate of two or three percent (as has been used in the past in many governmental benefit-cost studies) he would find the program to have substantially more benefits than costs. However, in an era when one can put his money in a savings bank at 5 percent and be almost completely certain of getting the money back at some time in the future, it seems foolish to consider such low discount rates. Even when prevailing interest rates were lower there is some question whether discount rates of 2 percent or 3 percent were justified. One suspects that in some studies the interest rate was chosen partially to help increase the benefit-cost ratio.

It was stated much earlier in this study, in connection with a discussion of discount rates, that the 10 percent rate might be thought of as combining a "normal" interest rate of 7.5 percent with an individual's utility function expressing his preference for immediate consumption over deferred consumption. The 5 percent rate was conceptualized as a combination of the "normal" rate of 7.5 percent with a government utility function expressing a preference for deferred benefits. If this is so, one might look at benefits and costs for the individual at the 10 percent discount rate, and for the government at the 5 percent discount rate. For this purpose only, benefit-cost ratios will be shown, again expressing the caution that the ratios can be very misleading unless you are closely aware of what things have been shown as benefits and what as costs. However, regardless of how things are shown, if a program has benefits that exceed its costs, its benefit-cost ratio will be greater than one. In looking at these ratios, the assumption will be made that 80 percent of income differentials are caused by increased education

For the individual, then, at the discount rate of 10 percent, the benefit-cost ratios are:

White males	3.13
White females	3.34

Nonwhite males	2.44
Nonwhite females	3.47

For the government, at the 5 percent discount rate, the benefit-cost ratios are:

White males	1.23
White females	1.02
Nonwhite males	0.82
Nonwhite females	1.54
Actual Upward Bound mix	1.16

I. Comparison of Results with Other Studies

It gives some perspective to compare these results for the government with the returns to education found by some of the prominent investigators in the field. Becker (1960) calculated a total (i.e., social) rate of return is equivalent education as 9 percent in both 1940 and 1950. The rate of return is equivalent to the discount rate at which costs equal benefits. Therefore, to say that the rate of return is 9 percent is to say that the cost-benefit ratio at a discount rate of 9 percent is 1.0. By contrast, the benefit-cost ratio of the government (using the 80 percent figures) is about 0.6 at 7.5 percent and about 0.3 at 10 percent. Or, to say it another way, the government's rate of return to the Upward Bound program is only about 5 percent, compared with Becker's 9 percent.

Schultz (1961) also expressed his results in terms of a rate of return. He found a total rate of return to a high school education of 10.3 percent and to a college education of 11 percent, both based on 1958 data. Hansen (1963), using 1949 data, found a total rate of return at age 16 to an additional three years of education (senior year of high school and two years college) of 8.2 percent, and to an additional five years of education (through college graduation) of 10.9 percent.

Renshaw (1960) compared 1949 income differentials between high school graduates and college graduates discounted at 5 percent and 10 percent with a cost of college education based on total educational and general expenditures of higher education institutions less organized research and extension, an allowance for books and supplies, and foregone income. His results were as follows:

		Income Differentials		Benefit-Cost Ratio	
	Cost of Education	5 percent Discount	10 percent Discount	At 5 percent	At 10 percent
All males	$7,414	$20,025	$9,117	2.70	1.25
Nonwhite males	6,150	6,913	2,832	1.12	0.46
All females	7,131	12,619	6,715	1.77	0.94
Nonwhite females	4,616	17,968	10,174	3.90	2.20

Renshaw's categories are very similar to those used for calculation of benefits and costs from the government's viewpoint in this study. On the benefit side he omits decreased welfare and unemployment payments; on the cost side he omits extra living expense while attending college and, of course, expenses of operating the Upward Bound program. All of Renshaw's benefit-cost ratios are higher than the corresponding ones found in this study.

The fact that all of the above studies find higher returns to education than the returns this study finds to the Upward Bound program should not be surprising. All of the other studies have addressed themselves to the question of returns to education exclusive of any governmental expenditures to stimulate college attendance. By far the largest part of the costs shown in this study were those made by the government and colleges to support the Upward Bound program. It could hardly be expected that the returns to this program would be as large as those found by Becker, Schultz, Hansen, and Renshaw.

J. Conclusions

It is clear that, if one is concerned that the government's social programs show a return that is measurable in the usual economic terms, this program is at best only marginally successful. However, it is folly to examine benefits versus costs for only one program. What are the benefits and costs of alternative programs to achieve the same goals? If one assumes that the overall goal is somthing that may be characterized as "breaking the cycle of poverty" then he must examine the benefits versus the costs of Head Start, of ESEA Title I, of present welfare programs, of guaranteed income plans, and other possibilities. It is very possible that Upward Bound would show benefit-cost ratios as high as or higher than any of these if data were available to measure them.

Secondly, it must be remembered that there are important benefits which Upward Bound hopes to achieve that are not readily measurable in dollars, and it may be that one, the opportunity for Upward Bound students and their children to escape a life in the ghetto, is the greatest benefit of all.

VIII. A SUMMARY OF BASIC UPWARD BOUND ISSUES AND NEEDED RESEARCH AND EVALUATION

A. Basic Upward Bound Issues

The purpose of this section is to summarize, in highlight form, how well Upward Bound is meeting its objectives; to present a distillation of program achievements; and to assess, insofar as could be learned, why some specific objectives are not being attained. The information sources for this section include: the findings from previous research and evaluations; the field visits made during this study; the interviews conducted with former members of national Upward Bound staff including contract agency staff and others closely associated with the program historically; and impressionistic judgements arrived at after a careful sifting of all data.

1. Upward Bound Program Achievements

a. Reaching the Intended Population

The Upward Bound program never exceeded 26,000 participants in any one year. This 1967 figure represents approximately 4 percent of the estimated 600,000 impoverished high school students who could benefit from this type of program. The decreased level of funding for Upward Bound has reduced the number of high school students the program could service by several thousand for 1968, 1969, and 1970.

In terms of the type of student recruited into Upward Bound, according to the specific focus in the Guidelines, he should be a young person living in poverty, who is an underachiever yet possesses potential for college. Available data on income of the families of the participants from 1966 to 1969 show that approximately 85 to 87 percent of them met the poverty criteria for admission into the program. On balance, the overwhelming majority of the participants have come from impoverished homes.

The determination of underachievement of the Upward Bound participants is difficult to assess. Using grade point averages (GPA) as one index of achievement would indicate that the participants are essentially in the C to B- range, about 2.5 to 2.9 on a four-point scale. This is on the overall slightly below the national average for all high school students. Because the Upward Bound Guidelines have consistently urged project directors to recruit students without relying solely on patterns of tests (e.g., I.Q. or other standardized measures) or grades, it becomes extremely difficult to see GPA or other test scores as indicators of the wide variety of underachievers enrolled in Upward Bound. In addition, various social and behavioral factors, as well as comments from interested and knowledgable persons such as teachers and counselors, are often also used in the recruitment process.

Another possible index, the Scholastic Aptitude Test (SAT), scores, similarly indicate that Upward Bound students are achieving significantly below a sample of the national average of all high school students entering college. If it is assumed that these standardized tests are accurate measures of mathematical and verbal ability, then Upward Bound students who are entering college in large numbers must be deficient in these skill areas. Yet, they stay in college at rates equal to their middle-class peers.

b. High School Retention

All data point to significant inroads made by the Upward Bound program in decreasing the high school dropout rate for Upward Bound enrollees. The participants' high school dropout rate is estimated at 5 percent by some researchers. This figure,compared with 35 percent for the general low-income population and 29 percent for Upward Bound enrollees' older siblings, presents a dramatic reversal of the dropout pattern for this type of student.

Attrition within the Upward Bound program ranges from 3.0 percent to 6.1 percent for the summer programs, and from 12.6 percent to 15.9 percent for the academic year programs. These figures are not related to high school dropout data since a student may leave the program and still graduate from high school. They do reflect, however, the pressures, often personal and family as well as financial, with which the disadvantaged student has to contend.

c. Impact on Participants

Participants in Upward Bound programs have universally expressed their approval of the program and how it has affected them. This testimony of impact ranged from personality and attitudinal improvements to academic gains. At least two studies have corroborated students' feelings in the areas of attitudinal change, indicating positive change over a period of almost two years. Results show improvement in motivation for college, self-esteem, internal control, interpersonal flexibility, and on other measures. Similar data were further reported in interviews with participants and Upward Bound staff during the summer of 1969.

The Upward Bound program, especially during the summer residential period, engenders feelings of a close-knit community, a spirit of camaraderie, and awareness of a strongly supportive staff who are receptive, sympathetic, and often ubiquitous.

The staff-to-student ratio is usually low; summer programs can afford the luxury of giving personal attention and assistance to the participants. The youngsters have guidance personnel and "big brothers" or "sisters," who are sometimes former Upward Bound graduates now in college serving as tutor-counselors. Tutor-counselors will listen to students' concerns and grievances.

Participants generally are treated in an adult fashion, are permitted freedoms and choices they never experienced in high school, are exposed to a wider circle of cultural and educational stimuli, and are accepted and generally given the privileges of college students on the campus.

It would appear that all these factors have considerable impact on the development of positive ego strengths and personality characteristics among the participants.

d. Academic Achievement

The single measure of academic achievement which exists for the Upward Bound program is the grade point average, (GPA), and the only change scores on this measure available are those reported by Hunt and Hardt in their Characterization studies. These data show that some 1,200 Upward Bound participants from June 1966 to February 1968 made no increase in their GPAs. In fact, GPAs decreased slightly over this time period as did those of a matched control group who did not attend Upward Bound. Although the implications are that the Upward Bound program does not measurably influence academic achievement in terms of GPA, this must be viewed in several ways. For one, the amount of data on GPAs is incomplete and small in comparison with the Upward Bound universe. For another, not enough time has been afforded the program to register influence on large numbers of academically deficient students. Another qualification which should be considered is the long exposure of students to a more traditional type of education in the public schools where they were not singularly successful. In their own terms, large numbers of Upward Bound students have indicated they were "turned off" by high school.

For many Upward Bound students, the intensive educational experience during the summer was followed by a "letdown" because of the poor quality or lack of contact in the follow-up program during the academic year. This was especially true in some rural areas where students were contacted only a few times after the summer.

In some of the Upward Bound programs, the effort to motivate and "turn on" students, to permit them to pursue their own interests, often was achieved at a sacrifice of the teaching in academic content areas as well as remedial areas. Many Upward Bound students and Upward Bound graduates in college reflected on the need for more structured academic classes, and on their need to be taught study skills and various other remedial programs.

Again, with respect to achievement data on participants, it is interesting to note in this regard that Upward Bound students in the college prep schools of the Independent Schools Talent Search Program (ISTSP), have shown outstanding improvements in GPA, on intelligence tests, on reading and other tests, and in motivation for college. It should be pointed out though that ISTSP is usually a full-year residential program offering a total environment for the student all the year and concentrating on intensive preparation for college. The ISTSP experience is apparently limited, expensive, and successful in its particular effort.

It also should be pointed out that various factors tend to militate against giving the Upward Bound program the kind of visibility and importance needed to produce significant change outside the program which would reinforce its effect upon the participants. There is an absence of vital communication between the Upward Bound program and the high schools the participants attend. High schools have not generally been drawn into the programs and made aware of the purpose and content of Upward Bound. The communities from which Upward Bound students come are singularly uninformed about the program and thus lend little general support.

It therefore appears, given all the above qualifications, that it would be unreasonable to expect the Upward Bound program to significantly affect the academic achievement patterns of its participants until a longer period of time has elapsed and until certain programmatic changes are made.

Such programmatic changes would have to include--but not be limited to--some ways of making the follow-up programs, the communities in which the students live, and the public school systems from which they come, more aware of, and more responsive to, the Upward Bound program.

2. College Enrollment and Retention

a. Enrollment

The Upward Bound program has achieved outstanding success in enrolling its graduates in colleges and universities throughout the nation. Data indicate that Upward Bound graduates have been enrolled at rates of about seventy percent for years 1967 to 1969. It is undoubtedly true that for many of the students enrolled in Upward Bound, college going had not previously been considered a live option.

The college-going rate for students in comparable social and economic circumstances is considerably lower. In fact, when Upward Bound college enrollees were compared with their older siblings, who are the closest approximation of the Upward Bound students on whom data are available, it was found that they were enrolled in colleges at rates 300 percent higher than their siblings.

There are apparently many factors responsible for this significant pattern of success, which, although mainly attributable to the Upward Bound program itself, are also contingent upon other elements operative at the same time. It has already been pointed out that the Upward Bound program had provided no appreciable increment in academic achievement for its participants. They therefore did get into college despite their academic disadvantagement.

A salient factor in getting these youngsters into college was the intensive intervention of the project directors or their assistants. They made certain that proper admissions forms were filled out and they knocked hard at the doors of admissions offices to "sell" the Upward Bound students to the colleges. They also communicated to the participants the availability and sources of financial aid, and assisted in obtaining employment for them during the summer and the academic year.

The availability of financial aid in various forms often made the difference between whether participants would attend college or not. It is fortunate that such aid programs exist for without them Upward Bound would lose its raison d'etre.

Other factors undoubtedly making it possible for Upward Bound graduates to enroll in such large numbers are the general expansion of college enrollments, the phenomenal growth of the junior college system, the open admissions policies of many public colleges, and the easing of enrollment criteria by a number of institutions.

No single factor accounted for the college enrollment success of Upward Bound, but rather the combination of all the above factors operating together.

b. Retention

The college retention data for Upward Bound graduates from 1966 to 1969 would indicate that they are staying in college at rates equal to those of the national college-going population. It is also projected that those who started in college will have a graduation rate of 50 percent, which is again about average for the national college-enrolling population. The status of Upward Bound college enrollees in college is also similar in terms of probation and good standing to that of the national college-going population. There are insufficient data available at present to explain this high retention rate. Thus the reasons for the Upward Bound retention success can only be conjectured.

Undoubtedly, the program does increase enormously the desire and motivation for college among its participants. It is the central focus of the Upward Bound program and the Upward Bound enrollees evidently maintain the aim to do well when admitted to college.

There is also a growing commitment by many colleges to sustain their academically disadvantaged enrollees during the difficult freshman year. This takes many forms such as:

... a special summer program to acclimate the students to college work and introduce them to study techniques

... a special first year-program which offers a lighter course load

... special classes geared for students who need introductions to content areas and tool subjects such as reading and writing skills

... increased counseling to offset the difficulties new students will encounter

... financial assistance and a reduced work-study load which does not overly burden the academic underachiever

... a "buddy system' often utilizing older, upper class Upward Bound students to assist the new students

Some assistance is also rendered, especially at host institutions, by Upward Bound project directors, who meet regularly with their college enrollees to boost morale and to arrange for special tutoring if needed.

There are unfortunately no hard data available on the extent of special and compensatory offerings made by colleges for Upward Bound enrollees. It is felt that research is needed in this area to provide a body of data which will promote supportive freshman programs of quality.

3. Institutional Change

Several factors relating to changes in colleges with respect to admisssions policies, guidance activities, and program efforts have been discussed in the preceding section. Undoubtedly, a small measure of these changes can be ascribed to the impact of the Upward Bound program; a still larger measure probably derives from a growing awareness by the colleges of the needs of the academically disadvantaged student making his appearance in ever larger numbers on the college scene. Some 700 to 800 colleges and universities now admit Upward Bound graduates and allocate some of their financial aid resources to them. But it is really not known how much influence or impact Upward Bound has exerted to promote these changes.

With respect to the high schools which Upward Bound participants attend, changes produced by association with the Upward Bound program are imperceptible. This has been confirmed in a previous study made by Greenleigh Associates and by the data collected during field visits to programs made this past summer. Here and there, indications were that individual high school teachers had been made more conscious of the need for restructuring curricula or changing their teaching techniques; that some high schools had become more responsive to the Upward Bound students through the Upward Bound clubs and accorded them special recognition; and that some university teachers had been sensitized to the special needs of Upward Bound-type students. But on balance, these were not very significant or durable changes.

Taken as a whole, the Upward Bound program has produced demonstrable change among its participants and has unlocked doors to higher education as a route out of poverty for them. But because of its small size and the overall funding limitations imposed on it, it is felt the program cannot, in the foreseeable future, contribute to or influence institutional change any more than it has to date.

B. Needed Research and Evaluation

1. Introduction

The purpose of this section is to discuss briefly the general research and evaluation needs of the Upward Bound program and to give some specific examples of the type and kind of work that should be undertaken. The examples given here deal with the areas of major concern where little information is available, and which are substantive enough to warrant further investigation. This is not an exhaustive description of these issues, but only some examples of problems which are important enough to be subjects for future investigators.

The examination of major studies of Upward Bound has revealed that some areas of the program have been scrutinized in depth, such as: characterizations and profiles of Upward Bound students, cost/benefit and income gains, financial needs of Upward Bound students in college, impact studies of the Upward Bound program on secondary schools and communities, and some longitudinal attitude change studies. There remain a large number of questions about the Upward Bound program. It is not the purpose of this section to answer those questions, but rather to suggest what some of them are, and some directions that might be taken to deal with them.

2. Research and Evaluation

The activities of the researcher and those of the evaluator do overlap each other, especially in a social action program such as Upward Bound. These are related kinds of undertakings, and the Upward Bound program will profit from both. The research activity is fundamentally an attempt to raise new questions, investigate new areas, and confirm or reject arguments based upon data generated by or for the research. To be sure, research undertakings and findings do have impact on a program, but they often ask more questions than they even attempt to answer.

Data collection is only a tool for research and evaluation, it cannot speak for itself. The census, for example, is not research, though much research is generated from the data collected in the census. The Upward Bound data system, should thus be regarded primarily as a tool for researchers.

It is appropriate at this point to mention that many of the suggested areas for investigation in this chapter rely upon giving the authority to the Upward Bound data system to collect the data that such research would need in order for it to be carried out. Without that mandate there will necessarily be a paucity of new research. Future investigators will not be hampered by problems of inadequate data in such vital areas as the college admission and retention patterns of Upward Bound students if the data system is seen not as an appendage to the program, but as integrally related to it.

The types of research Upward Bound needs most urgently are all concerned primarily with assaying different ways of operating the program. This means that the effectiveness of the program should be looked at as something that might be achieved in various ways. Through research and demonstration efforts such as those described later in the chapter, different ways of achieving the program's central goals might be compared with each other.

Evaluation is primarily concerned with making policy recommendations about the program as they specifically relate to the long-term national impact that the program is having or lacking. One cannot do a large-scale evaluation without baseline data from which to make comparisons.

For example, in order to evaluate the long-term impact of attending Upward Bound, longitudinal studies are needed from the point of entry until at least five to seven years after leaving the program.

Evaluations of Upward Bound have, in the past, had to look at program impact without aid of comparative data which are crucial to an evaluation of a program. For example, the figure that approximately 8 percent of the poor go to college is an admitted OEO approximation and has been used throughout the history of Upward Bound. This figure differs greatly from the data in the cost-benefit study concerning older siblings' educational attainment. It is impossible to say which is correct but it is probable that an accurate figure for the past would itself be changing, as the admission to higher education of people with low incomes and from minority groups has changed in the past several years.

This same sort of fundamental problem exists with college retention data for Upward Bound students. Clearly this is one measure of the success or failure of the program that any evaluation must contain. But to what is it to be compared? The national average for all college enrollees? The national average of all academically and financially disadvantaged enrollees? Comparisons should be made with both groups--but there are no adequate data for either category.

Most of the studies reported in Appendix A of this report (Abstracts of Previous Research) are either evaluations or the presentation of the results of data collection efforts. The Levitan, Cybern, and earlier Greenleigh Associates reports are all concerned with assessing the impact of the program from different points of view and using different methodologies. Kornegay, Gardenhire, and some of the data generated for this study by the data system, are all examples of data collection where no research hypotheses are posed or tested and where national impact is not assessed in light of the collected data. This means that almost no real research has been conducted on Upward Bound, though data collection, evaluation, and monitoring have been relatively constant.

3. Example of a Future Research Issue

Among the numerous research questions which could be asked about Upward Bound, this example will deal only with the general area of alternate ways of making a rural academic year follow-up program more effective. A brief discussion of the development of this issue will show the manner in which subsequent--and probably equally important--program issues could be the subject of research.

Given the immense variation in types and locations of host colleges serving rural students, is there an optimal rural follow-up program? Put in other terms, what different ways are there of administering rural follow-up programs that would make them more effective?

One way of analyzing such a question would be to establish first of all, the current staffing patterns, attrition rates, and high school GPAs in a random sample rural follow-up program. This information is available, in limited form, from national files containing proposals, and the remainder of the data could be collected by the data system. Suppose that the sample shows that:

... the sample staff consists of a full-time project director and a half-time secretary;

... the cost per student in this sample during the follow-up is 40 percent of the program budget;

... the sample shows a mean of 50 students enrolled in the follow-up and of these 50, 10 drop out of the program between September and June;

... the mean GPA change in the follow-up is -.02; and

... the mean number of contacts is one every 30 days per student.

The program goal is to decrease the attrition rate and increase the GPAs. In what alternative ways might this be done? Typically, a research project would consist of funding demonstration programs which were matched to the sample, but which would change one of the variables while controlling for the others. For example, demonstration projects could be funded to test the hypothesis that an increase in staff in the follow-up would reduce attrition and increase GPAs of students enrolled. Demonstration projects could be set up in which there would be two, three, and four full-time follow-up staff persons. Attrition and GPA would be measured at regular intervals throughout the academic year and compared for each of the experimental groups and for the control group.

Following is a possible result of such a comparison:

Group	Number of Staff	Attrition Rate	GPA Change	Number of Contacts Per Month	Cost per Student as Percent of Total
Control	1.5	.20	-0.2	1	.40
A	2.0	.17	+0.3	2	.46
B	3.0	.12	+0.5	3	.49
C	4.0	.11	+0.1	4	.61

It appears that, up to Group C, the more time and money spent, the more desirable change occurs. In Group C there is still change, but the results are not wholly positive, and the cost is high. The results of this hypothetical research project indicate that attrition can be reduced and high school grades can be raised if staff and contacts--and therefore cost-- are also increased That is, impact on students can be increased in this manner.

It should be noted that the research project stops short of advocating long-range changes in the structure and funding of Upward Bound nationally. That is a task which clearly would need evaluation of the impact that any recommended changes might have on the structure of the entire program. The suggested research would be more limited: it would examine two variables (grades and attrition), and by manipulating other variables (staff, number of contacts per month, and thus cost) would assess the results. Whether those results would have implications for policy would depend, to some extent, on how much these changes were desired.

4. Example of a Future Evaluation Issue

Certainly one of the largest unanswered questions concerning Upward Bound is the long-term impact of participation in the program on its enrollees. The following is an example of the kind of evaluation model that might be used to assess the overall success of the national Upward Bound program in taking enrollees out of poverty.

The kinds of data available, and those which will be needed to answer central questions of the study, are illustrated below.

a. The characteristics of all incoming Upward Bound students in regard to basic socioeconomic status are, in large measure, already available within the existing data system. Somewhat less complete information is also available on the date of entry into the program, and the date and reason (e.g., college entrance, dismissed, etc.) of leaving the program.

b. The data system is currently being utilized, both with project directors and college registrars, on an intensive tracking of a large group of students who left Upward Bound for college in the past years. Such tracking could be done for a stratified (race, sex, residence-type, and region) random sample of all Upward Bound graduates by year.

c. Information on what students do over a period of time in terms of education, earnings, income, marriage, etc. would be collected and compared to a matched control group of non-Upward Bound enrollees (such as same sex, older siblings) as was done for the cost-benefit study in this report.

d. College attainment would be analyzed at least twice yearly for all college enrollees. Despite the difficulty, a group of non-college enrollees representative of different amounts of time spent in the program, would have to be tracked down and their work experience and income data recorded. Upward Bound should not evaluate only college entrants.

The goal of the evaluation would be to aid not only present and future program policy planning, but also to other researchers for whom some of the data, such as cost-benefit analyses, is essential.

The evaluation would be aimed at seeing how many Upward Bound students, of what kind, leave poverty because of higher education. To continue to leave this question unanswered is to operate the program without knowing whether one of its central goals is being reached.

5. Additional Areas for Research and Evaluation

a. Problems for College-Going Upward Bound Students

Some tentative data exist on the problems of college-going Upward Bound students, but an in-depth study of a large sample is needed to answer such questions as: What are the major causes of attrition? What kind of supportive programs, financial, academic, and counseling, are needed to overcome attrition? Which Upward Bound college programs have been successful in overcoming attrition? What are the components of these programs?

b. Staff Characteristics

No study has been done of Upward Bound staff characteristics. A study is needed whose parameters would include: staffing patterns; recruitment; attrition; retention factors; Upward Bound program impact on staff, especially on indigenous nonprofessionals; staff training patterns; and student achievement as an apparent consequence of specific staffing patterns.

c. Achievement Criteria for Upward Bound Participation

Charges have been leveled against Upward Bound by several researchers who have indicated that the Guidelines have not been scrupulously adhered to in selecting students who are academically disadvantaged and who could not make it to college without Upward Bound intervention. A large-scale study of recruitment policies and practices is needed to discover whether, in fact, large numbers of students are recruited who are already well motivated, college able, and college bound. An essential element of this study would be the development and implementation of a testing-screening device to determine levels of underachievement. This is necessary because current measures and instruments such as GPAs and PSATs are too limited to be accurate indicators of degree of underachievement.

d. Intrastaff Communication

A lack of communication between Washington and the project level was pointed out by project directors during the summer visits undertaken by Greenleigh Associates field staff. A study should be made for the Upward Bound branch of the OE to determine the kinds of information wanted and needed on a regular basis by project directors and staff. The kinds of consultants recruited, their roles, their training, the purpose and scope of their site visits, and the services they can best render to the projects should also be studied. The regional role of the Washington staff, and the communications and advisory services they render via personal and regional meetings with project directors, should also be examined. The total research effort should be mounted with a view to improving the entire scope of the communications exchange between Washington staff and the field workers.

e. Upward Bound Data System

A study should be instituted to determine what additional types of data need to be routinely collected. The study should determine:

1) the ways in which the existing latent capacity of the data system could be used for intensive studies--such as those suggested above;

2) the opportunities for linking the system to more sophisticated statistical processing software (e.g., the IBM Scientific Subroutine Program, and others);

3) whether the data system would not be more effective if it were monitored from within the Upward Bound branch at OE.

f. Benefit of Summer Residential Programs

The most expensive component in the Upward Bound program, estimated at two-third of the year's funding, is the summer residential portion in which students spend six to eight weeks on a college campus. It has been assumed that these residential programs are most valuable but this assumption has never been subjected to research. A study of a large sample of residential and nonresidential programs is needed to determine which type of program best serves the students in terms of program goals; personal, academic, and social growth; and success factors such as enrollment and retention in college.

This represents an incomplete list of further studies which should be undertaken in order to clarify some of the large number of unanswered questions about alternate ways of operating the Upward Bound program in order to better accomplish program goals.

g. Comments on Possible Future Benefit-Cost Analyses

In a sense, benefit-cost analysis of social programs is in its infancy not because the concept is new, but because such analysis, in its present state of development, cannot accurately measure all of the important benefits and costs, nor is there agreement on a method of measurement that would allow rough estimates of their magnitude. In benefit-cost analysis of educational programs, the following are only some of the factors which could have large effects upon the results:

1) the extent to which differences in income associated with education are caused by education;

2) the proportion of expenditures on education which constitutes an investment and the proportion which constitutes current consumption expenditures;

3) the appropriate discount rate: in a situation such as this, where the costs all occur in a short period of time and the benefits extend over many years, the selection of a discount rate is critical, but there is no consensus on the appropriate one;

4) the importance of such long-term intangible benefits as crime reduction or the opportunity for the next generation to be raised outside of poverty.

Given these deficiencies in benefit-cost analysis, there are serious questions as to how much more sophisticated one might want to get in measuring the measurable while continuing to omit the unmeasurable. If the purpose of such an analysis is to aid in decision making, rather than merely an attempt to use numbers to justify an existing program, it cannot be emphasized too strongly that what is needed is similar analyses of other programs designed to accomplish the same goals. Analyses of such other programs would quickly point out important differences in costs and benefits among programs and thus should enable decision makers to distinguish rather quickly between largely effective or ineffective programs, reserving more sophisticated studies for programs which appear similar in benefits and costs, or for which major unanswered questions appear amenable to resolution with more sophisticated analysis.

A few important improvements in available data, which would enable benefit-cost analysis to be better performed in the future, are listed below:

1) The 1970 Census will provide, for the first time since 1960, adequate information on earnings, cross-tabulated by age, sex, race, section of the country, and amount of education. This will enable two important improvements in the determination of benefits. One is that it will be possible to use earnings, rather than incomes, since it is presumably earnings that are most affected by education. The second is that it should be possible to get the earnings directly by race for all age and education categories, rather than having to approximate them with a race-correction factor, as this study was forced to do.

2) The Upward Bound data bank contains the names of the high schools and colleges attended by the Upward Bound students. But the financial records now typically kept by school districts do not enable one to estimate the cost of education per student at a particular school, much less for an individual student. However, most states require annual reports from school districts that would enable an investigator, with sufficient time, to get an average cost of education for the district. This would be an improvement on the nationwide average that was used in this study.

Similarly, more time for investigation would enable the researcher to investigate the colleges which Upward Bound students attend, allowing him to attach a tuition cost, and perhaps a total cost of education, directly to the individual student. This would be a substantial improvement over the present study, which uses a nationwide weighted average based on an assumption that Upward Bound students attend colleges at various cost levels in the same proportions as the general population.

3) In the section entitled "The Sample" in Chapter VII, some ambiguities in the data system were mentioned. It should not be difficult to remedy these, thus improving slightly the quality of information about the educational attainment of the Upward Bound students.

4) Gathering of data about educational attainment of older siblings should be made a regular part of the data system. At present it is necessary to rely on a study at a single point in time. It would be desirable to record the age of each older sibling, as well as his educational attainment.

5) The 1970 Census will make it possible to extend for another decade the type of study done by Miller (see Bibliography, Appendix D) which shows the growth in real incomes caused by expansion of the economy. This extension may make it possible to use different rates of growth for different levels of education. The data in the Miller study (based on the 1950 and 1960 censuses) show some differences of this sort, but they are too conflicting and tentative to use with confidence at present.

6) It should be possible to obtain from the Bureau of the Census a tabulation of incomes for each year of education, instead of just for broad categories such as one to three years of college. Assuming that the base from the 1970 census is large enough to allow this, it should enable the researcher to make considerably more accurate estimates of the value of each increment of education.

7) As time passes, more of the Upward Bound students will have finished their education and will have a job. This will make possible much more accurate estimates of final educational achievement and dropout rates. It will also give some idea of the kinds of first jobs obtained by Upward Bound students compared with those obtained by the average student with equivalent education. The data bank should be expanded to make possible recording of this job information (both type of job and salary paid).

8) Assumptions have been made in this study regarding the amount of earnings of students while they are in school. It should be possible to gather accurate income data on Upward Bound students on a regular basis. Although the amount is small, the fact that they occur early means that they are reduced very little by the discounting process.

Future benefit-cost analyses thus would need more time and data to be more complete than the one in this report. As the report itself notes, such an analysis must delineate carefully the assumptions on which it is based and, even then, cannot account for a myriad of social benefits that may accrue to Upward Bound participants.

6. Conclusion

This chapter has presented in brief form some of the central program issues covered by this report. In addition, the needs and types of research and evaluation that should be the subjects for future studies are discussed as are specific suggestions for future benefit-cost analyses.

The examples provided in the chapter are not meant to be research designs but only signposts which might point the way to the kind of work that still needs to be done to yield a more complete analysis and assessment of Upward Bound.

IX. UPWARD BOUND STUDENTS IN COLLEGE

This chapter includes a description of the Upward Bound student and his unique problems concerning admission, funding, and retention. These problems, and the analysis of the unmet needs of the Upward Bound students during college, are viewed in the context of the freshman year, although many of the problems persist throughout the students' time in college.

A. Introduction

By June of 1969 some 24,700 Upward Bound students had graduated from high school. Approximately 70 percent of this group were admitted to college.[1] At the present time there are about 8,400 high school seniors in Upward Bound. If the 70 percent college-going rate remains relatively constant, by September 1970 there will be about 17,000 (1,047 from 1966, 3,600 from 1967, 6,300 from 1968, and 5,400 from 1969) Upward Bound graduates in college. In addition, a portion of the 1,028 1965 Upward Bound graduates will still be enrolled.

Most OEO-sponsored Upward Bound programs recruited students who had completed the 10th or 11th grades, and who, thus, were in the program for a minimum of two summers and one academic year.[2] The Bridge summer or Bridge program for Upward Bound students comes in the summer between high school and entrance into postsecondary school. The concern of this chapter with the Upward Bound college students starts when the student enters his senior year in high school and begins to plan and apply for college.

B. Higher Education, the Disadvantaged Applicant, and the Application Process

The Upward Bound student differs from most students with similar personal profiles in that he has not dropped out. Instead, he has somehow maintained his potential to complete high school and Upward Bound personnel feel there is the genuine likelihood that he may succeed in postsecondary education, even though he has no funds, often lacks self-confidence, and sometimes lacks family and peer encouragement.

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[1] Figures are from data supplied by Mr. Charles Cole and his staff at Applied Data Research, Incorporated, the contract agency for maintenance of the Upward Bound data base.

[2] The decision as to what grade (or age) level is best for the intensive intervention of Upward Bound is a decision left to--and subject to justification by--the proposing institution.

In terms of enrollment figures alone, institutions of higher education are undergoing a revolution. The total number of students in higher education more than doubled (from 2.9 million to an estimated 6.1 million) in the 10-year period 1956-1966.[3] More than 40 percent of all Americans in the 18-21 age group are enrolled in higher education.

Although the poor of this country are variously estimated at between one-fifth to one-third of our entire population, it was not until quite recently that either government or colleges called attention to their extremely low college-going rate of 8 percent.[4]

The goal of Upward Bound thus becomes more graphic: it is to increase both the college-going and college-staying rates, and thus the income potential, for a number of economically and academically disadvantaged high school students. The OEO estimates that there are 600,000 poor but able students in the country in any given year. Upward Bound worked with about 22,000 such students per year. So the program is working with only 3.8 percent of the population thought to be eligible.

In recent years college admissions procedures have become enormously complicated, if only by the sheer logistics involved in the processing of ever-increasing numbers of applicants. Where some state universities used to have, by law or tradition, an open-door policy on freshman admissions, the problems of high attrition, limited space, limited finances, and seemingly unlimited applicants have required establishment of screening procedures and cut-off points.

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[3] National Center for Educational Statistics, Digest of Educational Statistics 1966 (Washington, D.C.: United States Office of Education, OE #10024-66, 1966), Table 78, p. 64.

[4] Derived from estimates prepared for Dr. Frost by Office of Research Programs, Plans, and Evaluation at the OEO.

Insofar as the Upward Bound graduate is differently prepared, his application, both the form and the process, may well be materially more complicated than those of other applicants. This means that the admissions process grows more complex in terms of the amount of paper, etc., that an applicant and a college must deal with.[5] It is the task of a member of the Upward Bound staff--often the project director--to aid the Upward Bound student through provision of information, gentle persuasion, and "brokering" as the student attempts to engage in the admissions and funding process.

Ideally, aid in the admissions process would combine the special talents of the high school senior counselor, and those of a member of the Upward Bound staff. However, these disadvantaged youngsters are often the very students with whom the understaffed and overworked high school counseling staffs can spend little time because they often cannot be processed in a standard way. Thus, the task of searching out suitable colleges, reading applications, and asking for fee waivers becomes one of the final and most important jobs that members of an Upward Bound project staff undertake with and for the student.

Achieving admission to college for Upward Bound students is further complicated by the immediate presence of two general requirements: a pattern of grades, and standardized test scores, both of which show potential for doing college work. Often the Upward Bound student has neither since the program rarely performs educational miracles. The ability to do well on precollege standardized tests such as the Scholastic Aptitude Test (SAT) or the American College Test (ACT) has not been markedly changed. Nor has there been a radical shift in the grade pattern of Upward Bound students, according to existing data. Upward Bound has been a causative factor in producing positive academic results, but the habits of more than 15 years, like cumulative grade-point averages, change slowly. Regardless of the rapid development of the whole area of tests and measurement, there nonetheless remains a real gap between success in college and predicting that success through standardized precollege test scores, especially for the disadvantaged.

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[5] With the recent creation of the Division of Student Special Services within the Bureau of Higher Education, (U.S. Office of Education), it is hoped that the Special Services to Disadvantaged Students program will "pick up" where Upward Bound leaves off by providing aid to institutions to help them handle the greater load of "different" applications from students such as those in Upward Bound. No such aid was offered to the colleges throughout the time the Upward Bound program was a program of OEO.

The quandry is not one to which there is a solution. The job is by no means to plead for special consideration, but rather to attempt to make certain that a complete review of each particular case is undertaken in the decision process. Once the college has admitted the graduate of an Upward Bound program, this should be only the beginning of that institution's commitment to that student. There are the added complexities of funding this total-need student for the duration of his education, as well as the special academic and counseling needs that he may well exhibit during his period on campus.

It is obviously easier to offer admission to the postsecondary level than it is to provide for the student in such ways so that he will probably stay there. One former director of Upward Bound noted that if various in-college support and aid programs are not increased as the number of this kind of college student increases "then Upward Bound will be but a cruel tokenism at best."

C. An Overview of Financial Aid Considerations

It may be true, as the Division of Student Financial Aid at the U. S. Office of Education asserts, that "there is no financial reason that anyone can't go to college today." Nonetheless, this statement may confuse the availability of Federal funds with how they are, in fact, disbursed. The Upward Bound student must be considered as a total-need case. While it is true that he or she may work during school, the resources from summer earnings or family contribution are likely to be either very small or nonexistent. This is true for several reasons.

First of all, as a participant in a poverty program, most of the students come from a family which meets or falls below the stringent "poverty criteria" as set up by the OEO and thus cannot make any significant contribution. Many of the students in the program have families in which there is no earned income but are dependent upon various Federal programs such as AFDC and Social Security. Though a number of families do have employed members, many of these are underemployed and their wages do not place them out of poverty because of the irregularity, or low pay rates, of the type of labor they perform. In addition, the income of poor people, whether wages or welfare payments, is subject to radical changes due to seasonal or family changes, or to the relative instability of the amount of dollars in any given State or Federal welfare check and, of course, there is the wide variation in amount of welfare payments by each state.

Given the small and uncertain income, and the average size of these families, (6.4), it is unrealistic to expect reallocation of significant sums of money within the family budget. There are also a number of Upward Bound students who have no family at all

Secondly, because Upward Bound is a full-time summer program, usually conducted in a residential setting on a campus, this, itself, takes away the earning power of the student as does the academic year follow-up which, typically, runs evenings or Saturdays or both. The College Scholarship Service in Princeton, New Jersey, which administers the Parent's Confidential Statement, often, in its "need analysis" of a student, incorrectly inserts several hundred dollars as presumed summer earnings. This almost desperate need for money for college may account for the fact that the highest attrition in Upward Bound comes during the Bridge summer. Those Upward Bound students who have part-time employment during the Bridge summer typically do not earn a significant amount of money, even if they receive a small stipend from the program.

Thus, the total-need situation is probably not going to be alleviated either through the students' own resources or through his family. He must turn to the college itself and must avail himself of the combination of Federal and institutional grant and loan programs which it offers.

At the same time there is the constant pressure on colleges and universities themselves to remain financially solvent. Figures released at the end of September 1969 show that:

> Annual surveys of student charges among the nation's public colleges and universities reveal major new increases in all categories of charges to students...
>
> Tuition and required fees increased by 16.5 percent among the 113 members of the National Association of State Universities and Land-Grant Colleges and rose by 14.0 percent at the 261 members of the American Association of State Colleges and Universities.[6]

Charges to male resident students increased 39.9 percent from 1963-1964 to 1969-1970, roughly the same period OEO has been in existence, and to male nonresident students 38.4 percent.

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[6] National Institution of State Universities and Land-Grant Colleges, Office of Institutional Research, Circular No. 143, September 28, 1969, p. 1.

What follows is a description of aid programs, along with some of the conceptual and operational strengths and weaknesses they present in relation to the Upward Bound graduate.

1. Federal Programs

a. National Defense Student Loan Program (NDSL)

Between 1958, when the National Defense Education Act (NDEA) came into being, and 1968-69, 1.7 million students borrowed more than 1.5 billion dollars in National Defense Student Loans (NDSL) under Title II of that Act to help finance their higher education. Any student whose family does not have the ability to pay the costs of education at the institution he attends or plans to attend may be eligible for a loan. He may borrow up to $1,000 each year, up to a maximum of $5,000, as long as he continues to be a full-time student in good standing. Repayment begins one year after the borrower is no longer a student, and interest does not accrue until that time. The rate of interest is 3 percent per year. The loan must be paid up within 10 years; 50 percent of the loan is forgiven (at the rate of 10 percent per year) if the student becomes a public school teacher, and 100 percent (at the rate of 15 percent per year) if he teaches in a "disadvantaged" neighborhood.

Most Upward Bound alumni receive a loan, usually from the National Defense Student Loan program, as part of a financial aid "package" made up of grant, loan, and work-study money. Since the institution administers the National Defense Student Loan program, the student's loan will often reflect the affluence or poverty of the college as well as, or instead of, the extent of his need. Where a college has very little scholarship money to give out, it will tend to assign a large loan to the student. Sometimes it will give a loan to the student thought less likely to succeed and a scholarship to the potentially more successful one. Where a college has no other resources to meet the matching requirements attached to various Federal student-aid funds, it may assign a loan to the student in the same amount as his Federal grant. Thus most Upward Bound students will finish college with a sizeable debt.

There are many arguments against forcing any student to borrow heavily in college. It may create a source of worry which will detract from his ability to perform his academic task creditably. It may deter him from preparing for a career requiring graduate study. For the Upward Bound student there is, in addition, the fact that he may see himself as more likely to fail or drop out than the average student, and, therefore, with less ability to repay. It may also be difficult to persuade an Upward Bound student--and his family--that he should accept a Federal loan; he has grown up in a world where loans often represent a familiar and inextricable indebtedness.

b. College Work-Study Program (CWSP)

The College Work-Study Program was originally authorized under the Economic Opportunity Act of 1964 and is administered by the Division of Student Financial Aid. It provides institutions of higher learning with money to give part-time employment to students who need a job to help defray college expenses. The jobs usually pay the minimum legal wage ($1.60 per hour in 1969), and a student may work up to an average of 15 hours weekly during the school year. During the vacation and the summer he may work a 40-hour week. Jobs may be on or off campus. To qualify, the student must be enrolled full time and be in good academic standing.

A student with a good academic background can afford to work 15 hours a week without slighting his studies. But a student from a ghetto school, or a student who was not motivated to learn until the end of his secondary education, probably cannot take time away from school work without falling behind.

It can be argued that a part-time job is essential for a proud student who does not want others to bear the entire financial burden of his education, or that working at a job provides an important change of pace for a student who is not accustomed to long hours of unbroken concentration on intellectual problems. But these needs could be met by spending 5 to 10 hours per week at a job, instead of 15.

It must be noted that the popularity of the program has, in the past year or so, far exceeded the amount of money allocated by OE. In 1968-1969 while the amounts requested were $233 million, the amount awarded was $162 million or 70 percent of the total requested, which has hampered some institutions in putting together a financial aid package.

c. Educational Opportunity Grants Program (EOG)

The Higher Education Act of 1965 provides gift aid to institutions of higher learning for students in "academic good standing" who demonstrate "exceptional financial need."[7] Eligibility is based on a sliding scale with a maximum of $1,000 in an academic year where a student or his family cannot contribute more than $25 per year for his education. If the student or his family can contribute more than $625 per academic year, the student is not eligible for an EOG grant.

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[7] Higher Education Act of 1965, 79 stat. 1219.

OE literature concerning these grants states that, "The Congressional intent of the program is that financial need shall be a fundamental requirement for award of this federal assistance, but superior academic promise or performance shall not."

EOG awards were first made for the academic year 1966-1967. They could be a real step forward in making higher education accessible to everyone who wants it and has the ability to benefit from it. As the number of students graduating from Upward Bound has increased over the years, the amounts appropriated for EOG have decreased. This is particularly true of the past two years, Fiscal 1969 and 1970, and the academic years, 1968-1969 and 1969-1970. The Chronicle of Higher Education, speaking of this situation, summed up:

> Overall, in fact, the Educational Opportunity Grants program remains significantly curtailed... The result is the program will serve fewer students next year (1969-70) than this year (1968-1969).[8]

Table 80, which follows, shows what the extent of this cutback has meant, not only to Upward Bound, but to colleges and universities nationwide who have sought to increase their participation in the EOG program.

One project director, who is also a dean at his institution, summed up the dismay and deep frustrations that the field analysts found when talking to both project directors and to representatives of offices of admission and financial aid:

> I work hard with the UB kids to get them ready for college; I work hard with my college to get it ready for the UB graduates. Then I find out there is no money where my mouth is--the college finds its Federal aid request cut back... Foundations say that since such aid is available from Federal sources, they wish to allocate their resources elsewhere... Who is kidding whom here, and who in the hell is going to explain this to the Upward Bound kid who we all--including the kid himself--worked so hard to "turn on?" This situation produces more dissatisfaction at more levels than any problem I know in higher education at this time.

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[8] The Chronicle of Higher Education, "79,500 Needy Will Receive 1st Year Grants," February 24, 1969.

The matching fund requirement sometimes operates to keep an institution from using all its EOG money or from using it for those who need it most. The institutions which have strict academic requirements for recipients of their non-Federal scholarship moneys often depend entirely on money from other Federal programs to match EOG. Where a student is eligible for the maximum EOG award and, therefore, must also have a large matching grant, the college or university may correctly feel that an NDSL loan would impose too great a burden, and as a result, will grant less of both EOG and loan money--or decide it cannot admit the student at all. Some universities find that once they have met their existing NDSL obligations to graduate students and to non-EOG undergraduates, their loan funds are insufficient to match EOG grants.

Although thousands of Upward Bound alumni have created a new demand on the college scholarship market, columns 5, 6, 9, and 13 on Table 80 show that there has not been a corresponding supply of new Federal money. Instead, there is keener competition for existing funds. In the face of this competition, it is often understandably difficult for the college financial aid officer to turn his back on two hardworking, lower-middle-class applicants who had high grades all through high school and need $500 each in order to give one $1,000 EOG grant to an erratic, low-income applicant who only recently began to present a school record which indicates the capacity to do college work.

There are also signs that some EOG grants are awarded competitively on the basis of academic merit. One Upward Bound project director wrote: "I am sorry to report that no EOG grants were used for Upward Bound students. I have the feeling that our financial aid officer views these as another type of National Defense Loan to be used for students with good high school records."

In addition, the program often makes a large number of small awards, even though there were more than enough applicants who are eligible for the maximum of $1,000. This may happen for various reasons such as inadequate matching money; the desire not to use a large loan as the matching fund; the desire of financial aid officers to publish impressive statistics about the percentage of their students receiving scholarships; the feeling that when there were 10 equally needy students it was unfair to award $1,000 to 2 when you could give $200 to each of them. A good many institutions appear to have overlooked the USOE request that the maximum grant of $1,000 be given to eligible grant recipients.

Since EOG funds may not be granted for more than four years, many Upward Bound students, although otherwise eligible, would have to look elsewhere for scholarship aid toward the end of their undergraduate careers since they have so much academic catching up to do that a five-year course is as necessary as it is preferable. The present system discourages this. In better-endowed institutions money is likely to be available for a student who has made satisfactory academic progress for four years, but how will that student, who probably already has a part-time job and a good-sized loan, get through a fifth year if he attends a college which relies for financial aid mostly on Federal resources?

There is also the question of renewal of EOG grants generally. Table 80, in columns 6 and 13, shows that the amount of monies expended on renewals has not increased much. This may be due to attrition of EOG students or because institutions use more monies for first-year students than for upperclassmen, or it may result from a Federal allocative decision. Whatever the reason, it is hoped that EOG will be focused more upon meeting the needs of Upward Bound students who may be unable to attend college if EOG is continually cut back, especially now that EOG and Upward Bound are both administered by the Bureau of Higher Education in OE.

The USOE is attempting to amend the legislation to make the EOG program truly useful for students in poverty by eliminating some of these problems.

A summary of the three Federal student financial aid programs discussed above is presented in Table 81. With the exception of the loan program, NDSL, it is easy to see that the obligations, and thus the number of students served, is not keeping pace with the steadily increasing numbers of economically disadvantaged students who are applying to colleges. Upward Bound graduates may well, under these circumstances, experience greater difficulty in securing adequate financial aid packages in the immediate future.

Tables 82 and 83 show the ways in which financial aid is being distributed to Upward Bound graduates in colleges. It appears that only 15 percent of these students can contribute any funds from personal or family resources, and that this contribution makes up less than 6 percent of the total aid package. Almost half the students receive funds from "Other Grants" (which usually means institutional funds). Such grants make up about one-fourth of the total package.

If EOG funds, for example, are cut back we should expect this to effect the 68 percent of Upward Bound students who receive such funds which, in turn, make up approximately 30 percent of their total aid packages. This

Table 80

Educational Opportunity Grants (EOG) Summary Data

Academic Year	Total Obligations (millions)	Total Students Aided by Awards	Participating Institutions	Students Receiving Initial Year Awards	Students Receiving Renewal Awards	Requested by Institutions for Initial Year Awards (millions)	USOE Panel Approvals, Initial Year Awards (millions)	USOE Obligations to Initial Year Awards (millions)	Difference Between Panel Approvals and Obligations, Initial Year Awards (millions)	Requested by Institutions for Renewal Awards (millions)	USOE Panel Approvals, Renewal Awards (millions)	USOE Obligations to Renewal Awards (millions)	Difference Between Panel Approvals and Obligations, Renewals (millions)
1966-1967	57.9	123,165	1,383	123,165	NA	105.5	73.9	58.0	-15.9	NA	NA	NA	
1967-1968	108.8	202,055	1,615	132,791	69,264	65.2	56.5	50.3	- 6.2	59.4	58.8	58.5	- 0.3
1968-1969	136.6*	271,471*	1,780*	141,151*	130,320*	82.9	73.1	67.6*	- 5.5	90.5	86.8	69.0*	-17.8
1969-1970	144.8*	280,600*	1,950*	100,200*	180,400*	119.5	98.7	54.1*	-44.6	100.5	91.2	90.7*	- 0.5
1970-1971	164.6[a/]	289,400*	2,100*	101,000*	188,400*	175.0*	135.0*	55.5*	-79.5	130.0*	110.0*	109.1*	- 0.9

* - Indicates that figures are estimated.

a/ - Awaiting Congressional and Presidential action after Presidential veto of January 27, 1970.

SOURCE: Division of Student Financial Aid, USOE (Data current as of December 25, 1969).

Table 81

Summary of Federal Student Financial Aid Programs

Academic Year	EOG Total Dollars Obligated (millions)	EOG Total Dollars Requested (millions)	EOG Total Students Served (thousands)	NDSL Total Dollars Obligated (millions)	NDSL Total Dollars Requested (millions)	NDSL Total Students Served (thousands)	CWSP Total Dollars Obligated (millions)	CWSP Total Dollars Requested (millions)	CWSP Total Students Served (thousands)
1965-1966	-	-	-	179.3	NA	378	74.0	74.0	150
1966-1967	57.9	105.5	123	190.0	227.5	395*	139.5	155.9	288
1967-1968	108.8	124.6	202	190.0	243.1	429*	131.0	174.2	314
1968-1969	136.6*	173.4	271*	190.0	269.7	442*	161.9	232.7	395*
1969-1970	144.8*	220.0	281*	221.1	318.0	513*	169.9	275.0	375*
1970-1971	164.6[a]	305.0*	289.4*	Budget Not Formulated	370.0*	Budget Not Formulated	Budget Not Formulated	335.0*	375*

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* - Indicates that figures are estimated.

[a] - Awaiting final Congressional and Presidential action-after veto of January 27, 1970.

SOURCE: Division of Student Financial Aid, USOE (Data current as of December 25, 1969).

has not happened yet. In fact, the average total dollar value of student packages (including personal and family contribution, if any) has been:

1967 - $1,279
1968 - $1,275
1969 - $1,529

thus showing a marked increase for 1969. However, it is unlikely that this trend will be able to be maintained.

In addition to revised legislation, there must be a reshaping of the attitudes of many financial aid officers around the country and a budget commensurate with the numbers of students in need of the aid. EOG awards have been, and could continue to be, a welcome benefit to the Upward Bound student who receives them; but they will not meet his needs fully or directly. The recent cutback in the numbers of students receiving EOG grants may result in a sharp curtailment in the oppourtunities for Upward Bound students to go to college.

2. State Programs

State scholarship and grant programs, where they do exist, are often restricted so that only the brightest students are eligible. Some states only consider students in the top half of a high school class. In other states students do not qualify for the state program unless their Standard Aptitude Test scores total 800 or more. Where there is a large general program, the states often place considerable emphasis on academic standing.

All of these restrictions reduce the usefulness of these programs to Upward Bound graduates. However, a few high population states, such as Illinois and Pennsylvania, are making genuine efforts at providing large-scale general aid to all their high school graduates who are in need.

3. Grants from Corporations, Foundations, and Other Organizations

There are many nonacademic, nongovernmental scholarship sources. Some of them are national organizations; a greater number are small local groups or foundations. Their awards are generally made on the basis of financial need and a high academic record. In addition, most of the scholarships provided by smaller groups are restricted to recipients who have some talent, interest, or characteristic which is of special concern to the donating group. Very little of this kind of scholarship money is available to students who come from families in poverty and have not had outstanding high school records.

Table 82

Percentage of Upward Bound Students Receiving Types of Financial Aid

Year	Personal or Family	EOG	NDSL	Work Study	GLP[a]	Other Grants	Other Grants
1967	15.5	64.9	55.7	32.7	2.6	49.4	11.3
1968	14.0	68.7	53.0	32.5	-3.8	50.6	15.6
1969	12.5	68.8	49.7	43.9	-3.0	47.3	13.5

[a] GLP= Guaranteed Loan Program.

Table 83

Distribution of Types of Financial Aid Within Aid Package Received by Upward Bound Students (in Percents)

Year	Personal or Family	EOG	NDSL	Work Study	GLP	Other Grants	Other Loans	Total
1967	5.95	26.81	22.24	10.63	1.04	28.01	5.33	100.0
1968	5.48	28.51	21.21	10.06	1.77	25.53	7.42	100.0
1969	4.57	29.57	18.23	14.47	1.63	24.77	6.76	100.0

The large programs, such as National Merit and the General Motors awards, are keenly competitive, and usually only students who rank well in their high school classes and who have high test scores receive funds from them.

Some existing programs such as the National Scholarship Service and Fund for Needy Students have indicated an intention to concentrate on truly poor college applicants. NSSFNS operates primarily as a counseling and referral service; it also has a small scholarship fund which provides supplementary help to college applicants who win scholarships but who are unable to take advantage of these awards without additional assistance. In the past, many of its grantees have been more affluent than Upward Bound students. However, since 1966 NSSFNS staff members have been counseling Upward Bound students and some of the limited NSSFNS scholarship fund has been made available to them. Another small group of students are reached by organizations concerned with the support of specific minority groups, such as Aspira for Puerto Ricans, and the United Scholarship Service in Denver for American Indians.

Thus, the resources of the private sector only reach a minute proportion of those who need help. It should, of course, be added that both the private sector, as well as the USOE and other Federal agencies, have been more concerned in the past five years with disadvantaged students than at any other time in our history. This concern, however, must be put in the context of allocations of resources which are strained by the general conditions of the economy, and, sadly, by the recognition that Upward Bound is a program whose goals, though broad, have not been influential enough to call forth any additional resources. It deals, after all, with "only" several thousand college students out of a total of more than six million.

D. Unmet Needs

The job of a college which accepts an Upward Bound student has just begun when it has admitted him, put together an appropriate financial aid package, and brought him to the campus. If these students are merely allowed to sink or swim on their own once they arrive, the result may well be a fulfillment of the prophecy made by many educators concerning the expected high rate of attrition of Upward Bound college students. However, the college does not really know that the failure indicates inability to satisfactorily perform college work. Instead, it is highly likely that such a student cannot perform well, at least initially, without special support. This means that not only the student has failed, but the institution has failed.

The experience to date, with colleges and universities which are funding Upward Bound programs and/or accepting Upward Bound graduates, is that the unmet needs of these students are relatively easy to describe but difficult to meet in terms of personnel and funds.[9]

Conversations with Upward Bound students already in college, and with adults who counsel and assist them, reveal that the single most important special support this kind of student needs in college is the feeling of security which one-to-one personal contact brings.

The forms that such support can take are many and varied, and range from the provision of tutors (often paid for by the College Work-Study Program) to special advisors who have lighter loads, and, necessarily, include recognition at all levels that the needs of this student are different.

Ideally, personal contact could be provided by faculty members whose load would be lightened so that they might serve as more than simply an advisor to students. The goal would be to provide a central person to turn to whether the problem was dropping a course or finding out how to secure an emergency loan, two fairly common procedures that can make big emotional and academic differences to the student, depending on the facility and speed with which they are undertaken. Perhaps, in some ironic and odd fashion, the problem lies partially with Upward Bound, since there is little doubt that the program emphasized personal contact, low student-teacher ratios, and the almost constant availability of people who would listen to, and try to suggest solutions for, almost anything the student chose to discuss. The insertion into the anonymity of college registration can be the beginning of a downward slide.

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[9] David Gottleib, and Elizabeth Gaumer, Report of the National Conference on Higher Education for Disadvantaged Students (University Park, Pennsylvania: State University, College of Human Development, May 1969). Also: John Egerton, Higher Education for "High Risk" Students, (Atlanta, Georgia: Southern Education Foundation, April 1968). These are two documents which outline the need for, and content of, various kinds of supportive measures which are or could be undertaken by colleges working with students such as graduates of Upward Bound programs. Both documents predate the passing of Higher Education Amendments of 1968 which create the Division of Student Special Services at USOE. This Division will have one program, Special Services for Disadvantaged Students, whose goals revolve around the need for support programs. As this chapter is written, that program is preparing its grant application guidelines. The director, speaking in October 1969, said he expected to be "flooded with applications."

At present many colleges resist the idea of offering special help because it takes a great deal of time and energy, preferring first to determine what the students need, and then to provide staff for it. The colleges will not change their attitudes and practices just because they are told that they must help these students; they must be shown how and in what situations they can and should help. Upward Bound, as a program, did little for or with colleges other than entreat and encourage. Perhaps Upward Bound could do no more, but many colleges seem to have hoped for and expected more. Many of these students may be contributing to the meaningful racial and economic integration of the freshmen class. Such integration brings with it strains that may first show up in informal conversation with a trusted person, and, if not attended to, will shortly show up in a more dangerous way in declining school performance. It is interesting to note that the classic study of college dropouts by the OE shows that academic reasons are stated as more important than financial ones for dropping out:

> In terms of most important reasons for dropping out... there was a 3:1 ratio of total academic reasons to total financial reasons. The ratio was 2:1 in publicly controlled and 5:1 in privately controlled institutions, despite the normally higher costs of the latter. When dropouts mentioned a second or third factor, it was more frequently one indicating financial difficulties..., but when students named the changed circumstances, which might have altered their decision to withdraw, academic difficulties returned to the forefront.[10]

While a central concern of this chapter must, of course, be the attrition possibilities of these students, it has been discussed in the framework of attrition prevention.

It is probable that, for Upward Bound students particularly, there is a relationship between the amount of attrition, whatever it may be, and the amount of personal contact, the adequacy of the financial package, the degree of curricular adjustment, and the provision for meeting some of the above-mentioned unmet needs.

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[10] Robert E. Iffert, College Applicants, Entrants, Dropouts (United States Office of Education Pamphlet, CE No. 54034, Bulletin 1965. Number 29. 1965 Washington, D.C.), p. 15, passim.

E. Conclusions

At present there seems to be little exchange of experience among the colleges and universities conducting programs for disadvantaged students. There also seems to be little communication between colleges with experience and those who will be accepting Upward Bound students and others like them for the first time in the near future. Without such cooperation and pooling of knowledge, each college accepting its first "risk" student will have to find its way by trial and error. This is an unnecessary disservice to that student. Perhaps the Policy Guidelines of the Special Services for the Disadvantaged Students program will inject some common focus and funds to this area for the first time.

To achieve the goal of insuring that these students stay in college, supportive services of a wide variety were needed when the first Upward Bound graduates entered college in 1965 and this need has grown in intensity to the present. These services are, and should be thought of as, necessary components of the complete "package" which includes admission, funding, and retention of this student.

Dr. Richard T. Frost, first National Director of Upward Bound, made a calculated decision not to spend Upward Bound monies for direct financial aid to students once they entered college, which he could have done legally. He felt that such aid might well militate against any legislation which would provide specific monies for this purpose. Such legislation, providing in-college support programs for disadvantaged students, Title I, Section 105 of the Higher Education Amendments of 1968, is now a fact. Among the choices open to Dr. Frost and to his successor, Dr. Thomas A. Billings, were to: fund individual students; fund a fully-staffed freshman support program; fund a few demonstration programs with monies going both to students and to staff; or to implore the colleges to provide such funds.

Dr. Frost continually asked the colleges to provide supportive services for Upward Bound graduates. Dr. Billings adopted essentially the same policy. However, he did fund a few demonstration freshman-support programs beginning in the fall of 1969. This policy was reflected in a paragraph new in the 1969-1970 Guidelines:

> Assistance for UB "Graduates": " Applicants are encouraged to utilize private and institutional resources in providing counseling and tutoring for UB students in college, especially during their critical freshmen year. A limited number of proposals to fund such services for former UB students will

> be considered. Applicants seeking this type of support must show that private and institutional services have been sought and are unavailable.[11]

The Upward Bound programs run by the colleges and universities across the country are doing everything within their power to insure the student the likelihood of postsecondary educational success. It is not the job of Upward Bound, nor can it be, to furnish assistance of any magnitude to the student once he has reached the college gate. Upward Bound will assist the college by defining the student's needs and maintaining personal contact, but the full challenge is now with government aid programs and the institution which has admitted the Upward Bound student. If the challenge is unheeded, everyone will be poorer.

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[11] Guidelines, 1969-70, p. 13.

APPENDIX A

ABSTRACTS OF PREVIOUS RESEARCH

The following are abstracts of major research and evaluations performed on the Upward Bound program from 1966 to 1969.[1/]

A. Three studies: Characterization of 1966 Summer Upward Bound Program (CUB #1)

Characterization of Upward Bound: Academic Year 1966-1967 (CUB #2)

Characterization of Upward Bound, 1967-1968 (CUB #3)

Research Organization:	Syracuse University Youth Development Center
Investigators:	David E. Hunt and Robert H. Hardt
Dates:	1967-1968

1. Purpose and Methodology

All three of these studies were designed to test the effectiveness of Upward Bound in generating academic skills and motivation necessary for college success among the enrollees.

CUB #1 examined the kinds of students selected for the program and the progress these students had made over the summer of 1966. It also measured the differential effects of certain kinds of programs on different kinds of students.

The purpose of CUB #2, a continuation of CUB #1, was to explore the changes which had occurred in these students during the following academic year.

CUB #3, covering both the summer and follow-up programs, like the previous two studies, set out to describe the Upward Bound students, and to study the impact of the program on these students.

[1/] Complete studies are available in Office of Economic Opportunity Library.

In all three studies, eight primary change measures of attitude and motivation were used to explore change over time for Upward Bound students in order to determine program effectiveness in these areas. Below is a list of the measures as described in the CUB reports:

- **... motivation for college**
- **... importance and possibility of college graduation**
- **... self-evaluation of intelligence**
- **... interpersonal flexibility**
- **... self-esteem**
- **... internal control**
- **... future orientation**
- **... alienation**

In addition to these eight primary measures of change, each study employed different sets of tests and measures in order to accomplish different purposes. Before going into the individual methodology of each study, it would be appropriate to record the various points in time when the tests were administered for each study:

CUB #1 - First week of summer program 1966, Time 1, and the last week of the summer program 1966, Time 2;

CUB #2 - Late March to early May 1967, Time 3;

CUB #3 - June 1967, Time 4; August to September 1967, Time 5; and February 1968, Time 6.

2. Target Population and Samples

The 21 programs,a stratified random sample involving 1,622 students, were chosen for CUB #1 as a target from the total of 214 programs from which some data were obtained. The sample was selected according to seven variables which included: male-female ratio, number of students authorized per program, source of applications, number of years that program had been in existence,and black as compared with nonblack programs.

CUB #2 used the same 21 programs. Results were based on 1,230 students for whom data were available at all three testing periods, Times 1, 2, and 3.

Data in CUB #3 were based on the scores of 1,797 students from 24 programs, the original 21 plus 3 more selected at random. A control group, using 24 feeder high schools which yielded a group of 1,448 students was also tested. Some of these students were to be enrolled in Upward Bound and others were not.

3. Tests and Measurements Peculiar to Each Study

a. CUB #1

In addition to the eight primary change measures, several secondary change measures were included, such as occupational aspirations, plans, activities, and occupational preferences.

Site visitors during the summer completed a program rating scale which measured five components of the program: organization, control, warmth, flexibility, and commitment. Ratings were available for all projects studied.

Program climate questionnaires which measured the characteristics of the 21 summer programs were administered. Programs were rated according to flexibility, autonomy, individuation, evaluation, warmth, supportiveness, group harmony, and staff harmony.

During the first week, Time 1, students of the programs were asked to fill out biographical questionnaires which were designed to provide basic information on educational and family background as well as some indication of educational aspirations.

A postprogram questionnaire was administered at Time 2. This was similar to the preprogram questionnaire, which had been administered in Time 1.

b. CUB #2

At the 21 target school programs, students were asked to compare the Upward Bound program in which they had participated the previous summer with their high schools. Also, a comparison of GPA changes from the summer of 1966 to the middle of the 1966-1967 academic year was made between Upward Bound enrollees and a control group, and comparisons of scores on the Iowa Tests of Educational Development were made between Upward Bound students and non-Upward Bound students in the state of Iowa.

In the spring of 1967 a 26-item questionnaire, developed to provide information about students' educational plans and aspirations, was administered at the 21 target programs. These scores were compared to normative results from a national sample.

c. CUB #3

In addition to the eight primary changes, Hunt and Hardt added 17 more measures of change reflecting three areas: (1) the value that the student places on college attendance, (2) the student's awareness of the procedures and requirements necessary for college admission, and (3) the student's assessment of the adequacy of his own personal resources.

4. Findings

Undoubtedly, in view of the longitudinal nature, the most significant findings of the three reports are reflected in the eight primary change measures administered at six points in time over a period of two years.

The first survey of the summer 1966 program showed that, over the summer, the Upward Bound students' scores increased significantly on 6 out of 8 of the primary change measures. These were:

... motivation for college
... importance and possibility of college graduation
... self-evaluation of intelligence
... interpersonal flexibility
... self-esteem
... internal control

In CUB #2, Time 3, data on 1,230 students were available for all three times. The data showed that the scores on the following measures increased significantly:

... motivation for college
... interpersonal flexibility
... self-esteem
... future orientation

The first three measures had also shown a significant score increase during the summer program. Three measures had decreased significantly:

... importance of college graduation
... possibility of college graduation (which had increased in the summer)[2]
... self-evaluation of intelligence (which had increased in the summer)

Looking at the cumulative effect of both summer and academic year phase, these five primary change measures showed a significant increase:

... motivation for college
... interpersonal flexibility
... self-esteem
... internal control
... future orientation

The measures of importance and possibility of college graduation showed a significant decrease.

CUB #3, Times 4 to 6, which covered both the summer 1967 and academic year 1967-1968, measured changes in both new and returning students. The patterns of change for the new students were remarkably similar to those reported for the returning students in the 1966-1967 year.

Returning students, on the other hand, started the academic year with considerably higher scores on almost all measures and did not show any losses during this period.

Significant decreases for new students in both academic year surveys in the area of academic adequacy (i.e., importance of and possibility of college graduation), clearly demonstrate the traditional problem of the disadvantaged student who must return to a poor academic environment. It is indeed suprising, in the light of these factors, that summer gains in several of the measures reflecting attitude and motivation were maintained and even increased during the academic year program.

The fact that returning students did not suffer any academic year losses, indicates that a second summer program does have a buttressing effect.

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[2] Importance of college graduation and possibility of college graduation measures were treated separately at this time.

5. Other Findings Peculiar to Each Study

a. CUB #1

Perhaps the most interesting changes for the secondary measures were in the area of preference of activities and summer goals. Before the start of the summer program students placed highest priority on "studying and serious reading," and "lectures and classes." However, by the end of the summer the informal aspects of the program were valued more highly, e.g., "bull sessions," "field trips."

The students felt that, by the end of the program, they had achieved some goals they had valued most highly since the beginning of the program, such as "meeting new and interesting people," and "improving study habits."

Hunt and Hardt made an effort to examine the differential impact of summer programs. They believed that instead of asking which program is best, one should ask which program is more effective with certain kinds of students.

Therefore, the 21 target programs were classified according to (1) predominant type of student (low or high conceptual level, i.e., interpersonal maturity), (2) type of program approach (structured vs. flexible).

These two pairs of items were then cross matched and it was hypothesized that a high conceptual level and a flexible program or low conceptual level and structured program would be a favorable match. This hypothesis was supported by the primary change data; that is, in a favorable match of programs and students, students showed a greater degree of positive change in many areas than did those in unfavorably matched programs.

Analysis of the biographical data indicated the following data: the typical Upward Bound student was 16 years old, was in the tenth grade, came from a family whose average income was $3,341, and was slightly below average in academic achievement.

b. CUB #2

The survey of Upward Bound enrollees in November 1966 showed that the initial summer program tended to make their GPAs slightly higher than those of a control group. However, this effect diminished during the year and, in February 1967, Time 3, there was no difference between the GPAs of the control group and the Upward Bound students.

The Iowa Test scores for the Upward Bound students showed an increase after the summer program, but this change was not significantly greater than the control group. Upward Bound students increased their score by 1.9, while the control group showed an increase of 0.8.

On the positive side, almost 92 percent of the Upward Bound students expressed a desire to continue their education past high school, compared with the national figure of 72 percent who desire to go college.

c. CUB #3

There was no evidence of any increase in the GPAs of Upward Bound students, even those with a second summer of Upward Bound experience, when compared to that of the control sample. However, it was found that Upward Bound students were less likely to drop out of high school, and were more likely to apply and eventually enroll in college than the students in the control group.

B.	Study:	National Profile of 1967 Upward Bound Students
	Research Organization:	Syracuse University Youth Development Center
	Investigators:	David E. Hunt and Robert H. Hardt
	Date:	October 31, 1967

1. Purpose and Methodology

This report summarizes certain characteristics of students enrolled in the 1967 summer Upward Bound program. The findings are based on a 10 percent random sample of the 20,898 questionnaires received from the students.

The sample was divided into two subgroups: returning students who had attended the 1966 summer session, 51 percent; and new students, 49 percent. In addition, for a limited number of items such as sex, family, and family income, comparisons were made with results obtained from national surveys of the total American high school population.

2. Findings

Among the characteristics found in the survey were: Upward Bound students were almost evenly divided between boys and girls and were heavily concentrated in the 15- to 17-year age range.

Upward Bound students were drawn from families which have lower incomes, were larger, and were less likely to be intact than families of other American high school youths.

Upward Bound students included a substantial representation of the sizable ethnic minority groups in the United States: Negroes, Indians, Mexican-Americans, and Puerto Ricans. Approximately 50 percent of all students were black.

Upward Bound students had academic records which reflected a wide range of past performances. Sixteen percent reported that at least half of their grades were at the A level, while 26 percent reported that, out of every 10 grades they received, 8 or fewer were passing marks.

Over 90 percent of the returning Upward Bound students indicated that they were thinking of continuing their education past high school. About 85 percent of the new students had similar thoughts.

Upward Bound students who had been newly admitted to the program in the summer of 1967 differed relatively little in background or academic performance from the students who had attended the 1966 summer program. These findings suggest that the selection standards applied in 1967 were similar to those that were used in 1966.

A somewhat higher percentage (52.9) of the returning group were enrolled in the college preparatory program due to transfers into college preparatory programs by Upward Bound returning students.

Upward Bound students who had been enrolled in the 1966 summer program were asked to comment upon how others reacted to them after they had returned home. The largest group reported positive and supportive reactions from teachers, parents, and friends; a relatively large number reported that they perceived no changes in the responses of others; and only a small minority reported receiving negative responses.

3. Recommendations

No recommendations were either implied or stated in this report since its stated function was to summarize student characteristics.

C. Study: **National and Regional Profile of 1967 Upward Bound Students**

Research Organization: **Syracuse University Youth Development Center**

Investigators: **David E. Hunt and Robert H. Hardt**

Date: **January 24, 1968**

1. Purpose and Methodology

This is a set of statistical tables which differs in two respects from the National Profile of October 1967 just discussed. It is based on all of the 20,999 Upward Bound student questionnaires rather than on a 10 percent sample as in the earlier study. Also, the data are presented for each of the seven OEO regions as well as for the entire population, while the previous report presented data separately for new and returning Upward Bound students.

2. Findings

The findings are the same as those in the National Profile of 1967 Upward Bound students, October 31, 1967, but present a more detailed statistical picture, giving validity to the earlier report which included more interpretative commentary. The data from this study showed very little variation from the data based on the 10 percent sample in the other report.

3. Recommendations

Recommendations are neither stated nor implied in this report.

D. Studies: **National Profile of 1967 Summer Upward Bound Program**

National and Regional Profile 1967 Summer Upward Bound Program

Research Organization: **Syracuse University Youth Development Center**

Investigators: **David E. Hunt and Robert H. Hardt**

Dates: **November 17, 1967; January 22, 1968**

1. Purpose and Methodology

These two profies were constructed to present data obtained from another program source in Upward Bound, the project director.

The January report presents data on both a regional and national basis. While the earlier report does not include regional tabulations, the data for the two surveys were collected from Upward Bound 1967 summary questionnaires submitted by 244 directors of the 247 programs operating in the summer of 1967.

2. Findings

Enrollment data deal with numbers of programs and students, method of recruitment, retention and reasons for nonattendance of summer programs. Student characteristics cover demographic information and some socio-economic data such as family income. The data on staffing show the total numbers, their ethnic composition, and specific characteristics. Staff-student ratios are also displayed. The composition of the Public Advisory Committees and their backgrounds are recorded and summer student stipend payments are covered. No commentary or narrative accompanies the lists of data.

3. Recommendations

Recommendations are neither stated nor implied.

E.	Study:	Upward Bound, Early Progress, Problems, and Promise in Educational Escape from Poverty
	Research Organization:	Primary Prevention Research and Development Center
	Investigator:	Paul Daniel Shea
	Date:	July 31, 1968

1. Purpose and Methodology

The purpose of this study was to evaluate the long-term impact of Upward Bound on participants. To accomplish this, the problems in the Upward Bound high schools and colleges were studied as well as the changes students went through during the time they were in the program. In addition, a longitudinal study, continuing over a six-year period, was established in order to determine the success of these students in careers. Only part of the study was completed; many longitudinal aspects of the study could not have been dealt with until 1971-1972, but the Shea contract for Upward Bound evaluation was terminated in July 1968.

Data for this study were collected from the following sources: elementary, high school, and college records; personnel and written records of Upward Bound centers; and a variety of interviews, correspondence, and questionnaires.

2. Findings

The findings of this study fall into the categories outlined below.

a. College Enrollment

Upward Bound started with 17 programs in the summer of 1965. The majority of the students graduated from high school in the summer of 1965 and, therefore, participated in Upward Bound for only that one Bridge summer. The first possible semester for college enrollment of Upward Bound students was in the fall of 1965. Out of 952 students, 80 percent enrolled in college. Another 2 percent enrolled at some time during the next two years.

b. Persistence in College

Alumni of the 1965 program showed a persistence rate of 60 percent through five semesters in college, while 67 percent of those in the 1966 program, who entered college in the fall of 1966, had remained through three semesters. The possibly less favorable persistence for the later class can probably be accounted for by a more liberal recruiting policy whereby greater numbers of high-risk students were accepted in Upward Bound in 1966.

In addition, the persistence rates of a group of Upward Bound students who entered Texas Southern University in the fall of 1965 were compared with those of a random sample of non-Upward Bound students Eighty percent of the 1965 Upward Bound alumni remained enrolled through five semesters of study compared with 35 percent of the random sample of other entering freshmen.

The 1966 Upward Bound alumni show only a slightly higher persistence rate through three semesters of study than the sample of non-Upward Bound students with whom they were compared.

c. Matched-Pair Comparison of College Enrollment

For a comparison of rates of college enrollment, Upward Bound students were matched with non-Upward Bound students for the years 1965 through 1967 on the basis of significant variables. Every one of the Upward Bound students in 16 matched pairs enrolled in college in 1965, while only 9 of the 16 non-Upward Bound students enrolled. In 1966, 30 matched pairs of students showed similar results; 90 percent of the Upward Bound alumni enrolled in college whereas only 67 percent of the comparison group enrolled. In 1967, Upward Bound graduates went to college at the rate of 95 percent compared with the non-Upward Bound rate of 75 percent.

d. Changes

Questionnaires were completed by 1,268 students from the 1966 Upward Bound program at both the beginning and the end of the summer. The questionnaires were designed to determine change on these 10 scales:

Academic interests
Academic ability
Mathematics interest
Self-esteem
Initiative
Ability to get along with others
Ideal education
Ideal occupation
Expected education
Expected occupation

The students scored increases on 9 out of 10 of these scales. Only in "Ideal education"--which measured extremely high at the beginning--did they show no increase.

A year later a third questionnaire was obtained from 226 students who represented a random sample of the original 1,268 students. The pattern of change for this group was similar to that for the original group of 1,268. Most of the increases had been maintained over a one year period, except for drops in academic ability and initiative.

e. Family and Friends

This study did indicate that outside the classroom Upward Bound involvement did interfere with peer group relations. Because their summers and Saturdays were spent in the program, friendships were difficult to maintain yet very few good friends were lost by Upward Bound students and new friends were made through the program. Some envy of Upward Bound students by their non-Upward Bound peers was reported.

There were also instances of friction between the families and the students after the latter returned from the summer program. Families were slow to accept the fact that the child had undergone great changes, particularly in becoming more mature and independent.

The strongest correlation between the student's educational aspirations and factors in his family background is with his mother's education. The higher the mother's educational background, the higher the student's educational aspiration. No similar correlation was found with occupational aspiration which is apparently not as well defined at this stage and does not have immediate relevancy.

f. College Problems of Upward Bound Alumni

The reasons that some students never entered college after completing Upward Bound were examined and the author concluded that there were certain personality factors, such as seriousness of purpose, which make a student more attuned to the Upward Bound program, but more would have to be learned before determining who are the best candidates for Upward Bound.

Many students were not able to enroll in college because they did not possess the basic academic skills.

Similarly, after entering college the two most common problems troubling Upward Bound students are financial and academic. Inadequate aid packages may force many of them to work even though they can ill afford to do so because they need the time for remedial work and study. These problems are acutely aggravated by the absence of close personal counseling.

Another problem area for Upward Bound students is selecting the proper college and choosing a course of study to pursue.

g. Response of Students to the Program

Students already in college, when asked to give their impressions of the Upward Bound program, for the most part, were extremely positive. Although most of them had nothing but praise for the program and high hopes for their own futures, many, concerned with their own academic inadequacies, argued for more remedial skill courses, content courses, and courses in how to study and other techniques needed in college. This, the students suggest, should be in addition to the inspirational, free-ranging discussion courses which "turned them on."

3. Recommendations

Dr. Shea makes several recommendations with respect to program factors and the problems of the Upward Bound student in college. He believes that, in addition to the major emphasis on "turning on the students," stronger emphasis should be placed on remedial help during the summer program to upgrade academic skills.

Since an inadequate amount of aid becomes a major stumbling block to college enrollment, greater effort should be made to obtain adequate financial aid for students and to acquaint them with the complexities of aid packages.

The problems confronting Upward Bound students in selecting a college and also while in college could be partially ameliorated by increased counseling of students prior to their enrollment in college. Dr. Shea also suggests that the counseling of Upward Bound students should be carried over into the freshman year of college and should include the establishment of a "buddy system" whereby older Upward Bound graduates could assist the younger ones.

F.	Study:	Study of College Retention of 1965 and 1966 Upward Bound Bridge Students
	Research Organization:	Data Systems Office of Educational Associates, Inc. (EAI)
	Investigator:	John Gardenhire, EAI Study Coordinator
	Date:	1968

1. Purpose and Methodology

The purpose of this study was to obtain hard data on the postsecondary school experience of the high school graduate bridge students at Upward Bound projects in 1965 and 1966. Percentages of Bridge students starting college and remaining through the 1967-1968 academic year were calculated.

Data were obtained from historical records maintained by EAI and verified by telephone contacts with the project staff. Data for the 1965 group were based on a student population of 1,277, and for the 1966 group, of 1,234.

2. Findings

The 1965 bridge class from 11 programs had a matriculation rate of 80.5 percent and the 1966 class of 29 programs did slightly better with an 82.1

percent rate of matriculation. Retention rates through June 1968 were 76.9 percent for the 1965 bridge group and 82.4 percent for the 1966 class.

3. Recommendations

No recommendations were stated or implied in this study.

G.	Study:	Evaluations of the War on Poverty, Education Programs Evaluation of the Upward Bound Program
	Research Organization:	Resource Management Corporation
	Investigators:	Bonnie R. Cohen and Ann H. Yonkers
	Date:	March 1969

1. Purpose and Methodology

The purpose of this study was to evaluate the effectiveness of the Upward Bound program and to determine how closely the individual projects adhered to the Guidelines. A cost-benefit analysis of the program was also included.

The study did not generate original data but utilized data from other sources, such as: CAP Management Information System Data (MIS); individual project files kept by Educational Associates, Inc., and augmented by a series of Syracuse Youth Development Center Studies by Hunt and Hardt, which included a comparative study of Upward Bound students with their older siblings of the same sex; and studies on financial need made by the American College Testing Service. These data were analyzed in order to obtain indices of effectiveness of the Upward Bound program measured against stated program goals.

2. Findings

a. Recruitment and Student Selection

There is a definite pattern of recruitment of low-income students in the Upward Bound program. Furthermore, the data suggest that the Upward Bound enrollees substantially meet the poverty criteria mandated by the Guidelines.

The profile of 1967 Upward Bound students indicates that most of the enrollees learned about the program from some member of the high school staff, (37.0 percent from guidance counselors and 10.0 percent from teachers). Other important sources of information are Upward Bound students, (13.7 percent, and school friends, 10.1 percent). Since outside school sources account for only 8.3 percent of the recruiting, it appears that community action agencies, churches, and other community organizations are playing only a limited role in student recruitment.

According to Hunt and Hardt, two-thirds of the students recruited into the program have intelligence equal to college demands. GPA data show that Upward Bound enrollees perform on an academic level that is average for their high schools. However, these are students who, in the main, despite these GPAs, would not be acceptable to colleges according to other college predictors. Their relative success with respect to college retention would indicate that these students had been performing below their intellectual level, and were underachievers in high school.

b. Staff

According to the Guidelines, the Upward Bound professional staff should be made up of one-third university faculty, one-third feeder school staff, and one-third other specialists. The 1967 national data show that the projects have come close to meeting this criteria:

Types of Staff	Percent Employed
University faculty	40.4
Feeder school staff	29.0
Specialists	30.6

Among the other staff, 84 percent of the student-counselors, whose main objective is to establish a rapport with the program enrollees, were between the ages of 19 and 22 which would seem to make them well-suited for their job in terms of relative age closeness to the students.

c. Preparation for College

Although the program has not changed the normal GPA pattern among low-income students, the fact that 2 percent of the enrollees in 1965-1966 and 8 percent in 1966-1967 transferred to an academic curriculum, gives evidence of rising motivation. This increased motivation can also be demonstrated by the differences in high school dropout rates: 5 percent for Upward Bound students;[5] 35 percent for the low-income population in general;[4] and 29 percent for the older siblings of Upward Bound students.[5]

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[3] Judith Segal, Benefits and Costs of the Upward Bound Program, June 1967.

[4] Elizabeth Waldman, "Employment of High School Graduates and Dropouts in 1966," Monthly Labor Review, 1967.

[5] Hunt and Hardt, National Profile, October 31, 1967.

In addition, Upward Bound participants showed four times as many college admissions as their older siblings, i.e.: 79 percent of the Upward Bound seniors enrolled in college in 1967, while 20 percent of the siblings of Upward Bound students enrolled in 1967.

d. College Retention and Graduation Rates

Table 84 indicates the retention rates for Upward Bound students in college.

Table 84

Upward Bound College Matriculation and Retention

Year	Number of Bridge Students	Number Enrolled in College	Percent Enrolled	Number Remaining Through June 1968	Percent of Enrollees Remaining Through June 1968
1965	1,277	1,028	80.5	791	76.9
1966	1,275	1,047	82.1	863	82.4
1967	4,855	3,861	79.5	3,383[a]	82.4[a]

SOURCE: Figures compiled by Educational Associates, Inc.

[a] Extrapolated from data based on a February 1968 sample of 39 percent of Upward Bound students enrolled in two- and four-year colleges.

These data show that college entrance and retention rates for program enrollees are higher than the national average for these various enrollment periods.

Although there is no data yet on college graduation rates for Upward Bound students, their high rates of college retention are a good predictor for graduation rates at least as high or higher than the national average of 50 percent.

e. CAP-MIS Statistical Analysis

Table 85 is a display of the differentials in educational attainment between Upward Bound students and their older siblings assuming that, without Upward Bound, the attainments of both groups would have been similar.

Table 85

Educational Attainment Trends[a]

	Percent of High School Dropouts	Percent of High School Graduates	Percent Who Completed 1 to 3 Years of College	Percent of College Graduates
Upward Bound Enrollees	5	15	45	35
Older Siblings	29	51	12	8
Percentage Differential	24	36	33	27

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[a] Hunt and Hardt, Profile of 1967 Upward Bound Students, October 1, 1967.

These assumed differentials of educational attainment were then converted into potential income gains for the Upward Bound students. The income gain attributable to Upward Bound graduates, projected to age 65 and discounted at the rate of 5, 7.5, and 10 percent, and adjusted for attrition is shown below. The resulting figures are also compared with the program cost figures of 357.7 million dollars.

5 percent	
Benefit figure discounted to age 65	1,703.2 million
Cost figure	357.7 million
Ratio	1:4.8
7.5 percent	
Benefit figure discounted to age 65	1,228.7 million
Cost figure	357.7 million
Ratio	1:3.4
10 percent	
Benefit figure discounted to age 65	946.4 million
Cost figure	357.7 million
Ratio	1:2.6

Thus, this cost-benefit analysis indicates that the economic impact of funds allocated to Upward Bound is significantly greater than the costs and, in fact, suggests that Upward Bound ranks as one of the more successful Federal antipoverty programs.

3. Recommendations

This study did not present any recommendations for change in the Upward Bound program.

H. Study: Report to Congress: Review of Economic Opportunity Programs

Submitted by: The Comptroller General of the United States
U.S. General Accounting Office

Date: March 18, 1969

1. Purpose and Methodology

This report on Upward Bound is part of a larger review of the Economic Opportunity programs made by a private contractor, Resource Management Corporation, selected by the United States General Accounting Office. It is a brief assessment of several major program elements relative to acknowledged goals of Upward Bound; i.e., to generate skills and motivations necessary for success in education beyond high school among young people with low-income backgrounds and inadequate school preparation.

The review of Upward Bound examines selected aspects of 12 projects with a total enrollment of 1,652 students, conducted during the program year ending in 1967 at colleges and universities located in nine cities. In addition, this report includes an analysis of available national data in four critical program component areas to obtain measures of effectiveness: student selection, college preparation, college admission, and college retention.

2. Findings

a. Student Selection

Income data on 1,536 of the 1,652 Upward Bound students in the 12 projects studied revealed that about 300, or 18 percent, were considered ineligible according to OEO income criteria and Upward Bound Guidelines; these are in addition to the 10 percent in the program who are permitted by the Guidelines to exceed the income criteria within specific limits.

Various tests to determine intelligence, potential, motivation, and underachievement were developed to test the sample. Although the reliability of these tests was questioned by the researchers, they did report that two-thirds of the students have an intelligence equal to college demands. This study, and others, in analyzing grade point averages of Upward Bound students, found that from 20 to 27 percent of the Upward Bound students in 1966 and 1967 had attained B averages or better in their high school work before entering Upward Bound.

Noting that the achievement of high averages was not in itself conclusive evidence that students may not be underachieving, a comparison of 3,000

Upward Bound 1967 high school graduates with the national average of all high school students, was made based on data generated by the American College Test (ACT) Battery, which is designed to measure college potential. This study revealed that only 14 percent of the Upward Bound students scored in the upper middle and top quartiles, compared with 49 percent for the national average.

b. College Preparation

Evidence of academic performance and/or evidence of shift in motivation were the two criteria used to measure college preparation. These were postulated to have a direct relationship to evidence of reduced high school dropouts and change in curriculum. Results, which were almost identical with Upward Bound students compared with their older siblings, indicated that Upward Bound enrollees had an estimated dropout rate of 5 percent compared with a reported 35 percent dropout rate for the general low-income student population.

c. College Admission

In comparisons of the rate of college enrollment of Upward Bound students in two- and four-year colleges with their older siblings and with the national student population, the Upward Bound enrollment was 79 percent compared with 20 percent for their older siblings and 40 percent for the national student population.

d. College Retention

An analysis of the retention rates for samples of Upward Bound students in college during the 1965, 1966, and 1967 sessions showed that they were equal to or higher than those of the national student population. It was assumed that their graduation rates would also compare favorably with the national average.

3. Recommendations

Since a number of students were attending Upward Bound who were not eligible because their family income exceeded OEO poverty criteria, it was recommended that income eligibility determinations be improved.

Similarly, it was felt on the basis of achievement tests and GPAs, although these were not conclusive, that numbers of Upward Bound students were not strictly underachievers and may not have been in need of the program. It was therefore recommended that tests be improved for measuring high school achievement and college potential of disadvantaged youths.

I.		
I.	Study:	A Study of the Financial Need of Upward Bound Students: The 1968-69 Bridge Class
	Research Organization:	Financial Aid Services of the American College Testing Program, 1968
	Investigators:	H. Reed Saunders, Director Financial Aid Services (ACTS) Stephen S. Jones, Study Director (ACTS)
	Date:	1968

1. Purpose and Methodology

The ACT researchers undertook to evaluate the financial need of approximately 8,000 Upward Bound bridge students who were to enter college as freshmen in the fall of 1968. They also set out to measure the resources from which Upward Bound students might draw conventional college funds, including Federal aid programs,and to estimate the unmet financial need after the conventional resources made available to these freshmen by the college were used up. Finally, the study was to describe the position of the Upward Bound students in the financial aid community and the receptivity of the college financial aid officers to the Upward Bound program.

Studies were made at two sample groups of colleges and universities to which Upward Bound students were to be admitted. The first sample included colleges and universities at which considerable numbers of Upward Bound students had been in attendance previously. Direct personal interviews or telephone interviews to financial aid officers were made to obtain estimates of funds needed to cover fully the financial needs of Upward Bound students. Projections of overall shortages were made from personal interviews with financial aid officers.

The second sample, surveyed a month later, was made up of a random selection of 10 percent of the Upward Bound projects nationally. Telephone interviews were conducted with admissions officers to obtain data relative to college attendance or nonattendance, and admissions and financial aid sought. Information was used in making projections of financial needs.

Family financial statements were also obtained from 3,500 bridge students. Data from the Upward Bound Data System were used to determine college choices made by Upward Bound students. A Markov-Chain model was constructed to illustrate a method of predicting the college enrollment of future Upward Bound students.

2. **Findings**

a. It was found that the average Upward Bound student needed a college budget for the 1968-1969 school year of $2,065. Against this, the 3,500 family financial statements studied indicated that the average contribution from assets and incomes of parents would be $102.00, and student resources from GI benefits and Social Security were placed at an average of $32.00. Student earnings were not included in the financial need assessment since no conclusive data were available, although it was conjectured that a large number of students discontinued their bridge summer in order to provide themselves with additional funds.

b. Resources from conventional college sources, according to data obtained from the first sample group indicated sufficient Federal funds, through Economic Opportunity Grants, to fill about one-half of the financial needs of Upward Bound students. Other sources included state and institutional loan funds and scholarships.

c. Multiplying the average Upward Bound student budget of $2,065 by 7,000, the number projected to enter college in the fall of 1968, the total financial need was estimated at $14,455,000. This does not include those who did not plan to attend college although they may have made that decision because of lack of financing. If the total universe of Upward Bound bridge students, 9,600, was used as the need determinant, the total financial need would amount to $18,844,800.

This first need figure, $14,455,000, was used as a base to calculate the net deficiency in financial aid funds by subtracting the dollar amount of conventional funds available. This was done by different means in both. Using figures gathered from the first sample, the projected shortage was $1,490,000; and from the second sample, $1,707,810. The latter was considered more reliable because it had been studied a month later and therefore closer to college entrance.

d. In a discussion of the data obtained from responses by financial aid officers to questions relevant to financial aid policies, it was found that most institutions favor the more academically able in granting gift aid, although most of the financial officers asserted that the needs of all Upward Bound students were being met. This was in sharp contrast to other disadvantaged students whose needs could only be vouched for by less than half of the financial aid officers questioned. Other data point to favored treatment of Upward Bound students compared with the total of disadvantaged students going to college. The report concludes that Upward Bound students thus benefited from the strong efforts of Upward Bound project directors on behalf of their students.

e. In analyzing college financial aid policies, the report concludes that the aid policy usually reflects the admission policies of the institution. Commitment to the education of students with Upward Bound backgrounds is usually reflected in the provisions made to accommodate them financially and may further be reflected in the provision of academic and counseling assistance through the first year, in addition to lowering the admission standards.

3. Recommendations

The researchers made specific recommendations as possible solutions in a number of major problem areas:

a. Coordination of Upward Bound with all Federal agencies providing student financial aid and programs of guidance and counseling.

It was the researchers' opinion that the present system forced students to adapt to the patterns of dollars available, which often led them to select the institutions offering them the most advantageous financial aid package they could obtain, or perhaps to select the only college which offered them an aid package. This denigrates the importance of guidance and placement and militates against fitting the student to the college for which he would be best suited.

b. Provision of a long-range pattern of funding to alleviate some of the uncertainty that now prevails in the financial aid structure.

c. Analysis and study of admissions patterns of Upward Bound students.

d. Development of general supportive programs for Upward Bound students entering college to enable them to survive the transition.

e. Improved means of identifying Upward Bound students to financial aid officers, some of whom indicate that there might be surplus funds available for them.

f. Upgrading of the public relations effort to give the Upward Bound program higher public visibility at the national level.

g. Intense efforts should be made to persuade students who have dropped out of Upward Bound or who have not made plans to continue college to reevaluate their decisions, especially if these actions have been made on the assumption that financing for higher education is unavailable.

h. Intensive study should be made of patterns of funding for Upward Bound students, aid packages offered, and patterns of acceptance or declination by Upward Bound students as compared with the general college-going student population.

i. Provision of a forum for an interchange between OEO officials and financial aid officers to establish better relations and to provide an exchange of ideas and information.

j. Finally, the reseachers, commenting on the present insufficiency of funding to meet even the needs of Upward Bound college-going students, much less the entire universe of disadvantaged students, argue that if Upward Bound is to continue to survive and grow in the future, then requisite financing must be found for the education of Upward Bound graduates in future years.

In conclusion, the researchers call for cooperation and commitment by educators, legislators, and the public in facing the problem of providing adequately for the educable but high-risk student. They see financial need as only one of the complex needs of this type of student: "Financial need is only a part of the diverse considerations which bear on a student's choice to attend and ability to succeed in college. It is unfortunately a fact, however, that such a small element can be the death blow to the collegiate enterprises of a substantial portion of our student population."

J. Study: Upward Bound, A Study of Impact on the Secondary School and the Community

Research Organization: Greenleigh Associates, Inc.

Investigator: Harry Van Houten

Date: January 1968

1. Purpose and Methodology

The purpose of this study was to assess the impact of Upward Bound programs on secondary schools and on the communities from which Upward Bound students come. A number of factors were considered in selecting the cities to be studied. At least one city in each of the seven OEO regions was chosen. In each of these cities the high schools with the largest Upward Bound population were selected. Rural as well as urban schools were included as were two special programs, one involving a large number of American Indians, and one involving Mexican-Americans. Thirty-six Upward Bound feeder schools in 16 cities were chosen. Upward Bound participation in these schools ranged from 1 to 6 percent.

Greenleigh Associates staff familiarized themselves with all the Guidelines, available data, and operational policies of Upward Bound. Meetings were held with key Upward Bound personnel. Questionnaires were developed to be used in field work. Similar questionnaires were also designed and mailed to principals in 207 secondary schools. Interviews were conducted with 381 Upward Bound staff members and students from the 36 target schools. Community leaders were also interviewed and all reports and data relevant to the study objectives were analyzed.

2. Findings

Although Upward Bound has had a significant effect on the students involved, the program had a minimal effect on secondary schools and communities. This may be attributed to the inability of the groups involved to communicate with each other and to the small number of students participating from any one high school. However, the most important reason for the lack of impact comes from the perception that traditional educators have of the Upward Bound program and its sponsoring agency, OEO. Generally, they feel that the program repudiates the long-standing philosophy and pedagogy of the educational establishment.

3. Recommendations

To increase impact and benefits to participants, the study recommends:

a. A commitment on the part of all persons to improve the quality of the relationships, including encouragement of a public attitude of acceptance of public responsibility for education from nursery school through college.

b. More personal contact among Upward Bound and secondary school personnel and members of the community.

c. Provision of input and feedback systems between Upward Bound staff members and high school personnel.

d. School officials must be readily available to parents, students, teachers, and Upward Bound staff.

e. Inclusion of principals and Board of Education members on the Public Advisory Committees (PAC) of Upward Bound programs, and clearer delineation of PAC responsibilities in the Guidelines.

f. Greater emphasis on public relations.

g. The provision of training programs for project directors, and criteria for the selection of project directors to include the possession of potential leadership in the community at large as well as in the education of the disadvantaged.

h. Extension of assistance to Upward Bound graduates through the freshman year of college.

i. Adherence to Guidelines in selection of the target population with respect to poverty criteria.

j. More funds for Upward Bound to increase the number of students participating.

K. Study: Parental Involvement in Upward Bound

Research Organization: Cybern Education, Inc.

Date: June 1969

1. Purpose and Methodology

The purpose of this study was to determine the degree and the impact of parental involvement in the Upward Bound program. To accomplish this purpose involved development of three factors: an empirically based operational definition of parental involvement; the development of testable hypotheses about the effects of parental involvement as it is operationally defined; and the design of a long-range study to test the hypotheses.

Six Upward Bound projects were chosen for the study. Although these projects were not a statistically representative sample of all the projects, they did possess many characteristics that were expected to be related to parental involvement. The projects had previously been labeled high, medium, or low parental involvement, based on general impressions of the researchers. There were two projects in each category.

Each project was visited for three days by a three-man team. Interviews were conducted with staff members, parents, and students. Judgments were made about the degree of parental involvement and the performance levels of their children.

2. Findings

The two high involvement projects were in small cities and in medium-sized state colleges. Their directors were native to the project area, dynamic, committed, and were natural leaders.

The two medium involvement projects were in large cities, in large universities, and were serving urban ghetto residents. Both directors were relatively new in their jobs, and indicated considerable social distance between themselves and the people and communities they were serving.

The two low involvement projects were in large cities, in small colleges; they also worked with Upward Bound students residing in urban ghettos. Although both projects had directors, the focus of leadership was uncertain, and it appeared that the leadership was diffused throughout the staff.

Some of the more important findings regarding parental involvement were:

a. Only in the low involvement projects did staff members feel a need for more parental participation in their projects.

b. Only in the high involvement projects did all the staff members report having met at least some parents.

c. Staff members in the high and medium involvement projects perceived parental interest and involvement as motivated by concern for specific features of the project program, as well as for their own child's progress; in the low involvement projects, staff members tended to perceive parent interest and involvement as motivated only by concern for their own child's progress.

The educational level of the parents was lowest in the high involvement projects. More parents in the high than in the medium and low involvement projects said they had always been interested in the children's school activities. At the same time, more students in the high involvement projects than in the medium and low felt their parents had always been interested in their school activities.

Overall, staff members, students, and parents from high involvement projects reported more involvement of parents, more parental influence on projects, and more favorable dispositions toward influential parental involvement than in medium and low projects.

3. Operational Definition for Parental Involvement

The authors have outlined six easily quantifiable factors which constitute an operational definition of parental involvement. These factors were based, to a large extent, on the findings listed above.

... Project Interest - The members of a project staff state that parents are important to the project.

... Project Opportunity - The design for development of a project and the plan for implementation and operation of the project include specific procedures for contacting parents, for informing them about the project, and for including them in project activities.

... Parental Interest - The parents of project students state that they are interested in and important to the project.

... Project/Parent Situation - The setting, culturally and physically, makes it possible for contact to be achieved and maintained between a project and parents.

... Parental Participation - The parents work as members of project committees and other formal groups and are active in project activities.

... Project Effect - Parental involvement results in specific project policies and procedures.

4. Testable Hypothesis

On the basis of the information collected in the study, the authors present two functional relationships from which, they feel, a number of testable hypotheses can be drawn.

> Parental Involvement is a function of Project Effort times Parent Participation

where

> Parental Participation is a function of Project Interest, Project Opportunity, Parent/Project Situation, and Parent Interest.

The authors state that, "Experimentation isolating each of the components of these functional relationships could determine the extent to which each contributes to parental involvement."

They conclude with a discussion of the positive correlation found between student performance and parental involvement in Upward Bound projects. They point out that this correlation is not necessarily causation since they cannot say for sure whether students do better when parents are involved or whether parents of successful students become involved.

5. Recommendations

The report is followed by a recommendation in the form of a proposal for a longitudinal study of parents in Upward Bound which calls for a description and evaluation of the effects, both immediate and long range, of parental involvement in Upward Bound.

L.	Study:	Upward Bound: Fighting Poverty With A Sheepskin
	Research Organization:	Center for Manpower Policy Studies: George Washington University
	Investigator:	Sar A. Levitan
	Date:	November-December 1968

1. Purpose and Methodology

This brief critical assessment of the Upward Bound program from its origin in 1965 through 1968, just prior to its legislative transfer from the OEO to the Office of Education is part of a chapter from the author's book, The Great Society's Poor Law: A New Approach to Poverty, which is a study of the Economic Oppprtunity Act and was financed by a grant from the Ford Foundation.

The author utilized a variety of documents and source materials including official press releases, excerpts from the Congressional Record, Congressional Committee reports, the Upward Bound Guidelines, Educational Associates, Inc. reports, and Hunt and Hardt's 1966 and 1967 CUB reports, among others.

2. Findings

Although the findings are positive, the author is critical of the data generated and available and the claims for success made by the program. He concludes that:

a. Upward Bound is serving only a small fraction of the target population at which the program is aimed because of Federal funding limitions.

b. There is a lack of hard data to justify the costly residential summer programs and the small classes considered essential by the administration of Upward Bound to achieve its goals.

c. The administration design, by contracting out nationally to a nonprofit organization and lodging local administration with the host colleges and universities, bypasses the community action agencies.

d. Information is lacking on the effectiveness of the Public Advisory Committee in involving community action agencies, other local groups, parents, etc., in assisting in planning Upward Bound programs.

e. Recruitment of disadvantaged, high-risk students who would not ordinarily go to college is not universal. Some projects have carefully screened out the potential failures and have selected students with good grades who would be likely to go to college without benefit of Upward Bound. In fact, Upward Bound students' grades conform closely to the grades of other students in their schools.

f. Although he admits that the record of admission to and retention in college of Upward Bound graduates is outstanding, the author casts doubt on these achievements, especially those pertaining to enrollment, by pointing out that 46 percent of all Upward Bound students attend host colleges and universities which sponsor Upward Bound programs and which are generally committed to the admission of numbers of Upward Bound graduates. Also, many Upward Bound graduates enroll in junior colleges or four-year colleges which generally have lower admission barriers and somewhat less rigorous academic standards, viz., 80 percent of black Upward Bound graduates are enrolled in black colleges.

g. There is much doubt whether Upward Bound can achieve such stated goals as: influencing participating institutions to adopt admission standards more relevant to disadvantaged youth and to develop new curricula and teaching methods, or affecting the attitudes of many high school educators. The author sees the Upward Bound program, with 26,000 students, as too small to generate the kinds of changes desired.

3. Recommendations

Although no specific section of the report lists recommended program changes, a number are implied in the discussion of various portions of the program.

a. Substantial changes in data gathering and student tracking to create a complete data bank of reliable information on all program aspects.

b. Stricter adherence to the basic recruitment guidelines to assure the recruitment of disadvantaged, high-risk, underachieving students.

c. A review of administrative practices to insure that Upward Bound is directed and administered in accordance with its status as part of the community action program.

d. Research into various programmatic aspects such as the residential programs, small classes, the PAC and Academic Policy Groups, financial assistance programs, and influence on high schools and institutions of higher education, to assess the quality of effort and impact, and to provide alternative methods of operation.

M.	Study:	Students and Buildings: An Analysis of Selected Federal Programs for Higher Education
	Research Organization:	Office of Program Planning and Evaluation, Office of Education, U.S. Department of Health, Education and Welfare
	Investigator:	Joseph Froomkin, Assistant Commissioner, Program Planning and Evaluation
	Date:	May 1968

1. Purpose and Methodology

This paper is an examination of the operation of Federal higher education programs for student aid and facilities construction. It also briefly appraises two innovative programs: college recruitment of disadvantaged high school students and aid to developing colleges. Upward Bound is only one of the many programs and problems it deals with very briefly against a background of the growth of higher education, its attendant problems, and the complete Federal programs for student aid.

2. Findings

Utilizing data developed by Project Talent which shows that only 75 percent of all 10th graders from the lowest socioeconomic quartile, and the lowest one-half by achievement, finish high school, the author states that Upward Bound increased somewhat the chances of disadvantaged youth to finish high school since 762 out of 953, or 80 percent of those in the original summer 1965 program, enrolled in college and of these 388, or 50 percent, entered the sophomore year. But the Upward Bound dropout rate of 59 percent for college freshmen "is very close to the estimated rate in the model for youths in the lowest socioeconomic group." The author believes that on this basis very few Upward Bound students will finish more than two years of college.

The author points out that, if true, this is "unfortunate since statistics indicate that low-achieving students, especially from minority groups, do not attain significantly higher income levels unless they complete the full course of study."

3. Recommendations

In view of these negative data and predictions, Mr. Froomkin recommends that additional funds for Upward Bound be tied to the availability of student aid and that, until more money is available, Upward Bound should remain a small experimental program.

N. Study. College Enrollment of Former Upward Bound Students: A Profile and Summary

Research Organization: Data Systems Office of Educational Associates, Inc. (EAI)

Investigator: Francis A. Kornegay, Jr.

Date: May 1968

1. Purpose and Methodology

The purpose of this study was to provide a descriptive analysis on the enrollment patterns of former Upward Bound students in two- and four-year colleges and of the types of institutions they are attending. The data utilized include the entire population of colleges and universities (675) in which former Upward Bound students are now enrolled. The schools were broken down into categories defined by size: small (1,000), intermediate (1,000-5,000), large (5,000-10,000), huge (10,000 +); and by source of support: public, private, and church-supported.

2. Findings

The largest category of schools, 346 or 51 percent, were public institutions. Thirty-one percent were church supported and the remaining 18 percent were private. Forty-two percent of all schools enrolling Upward Bound graduates were intermediate-sized. The highest correlation of characteristics was public and intermediate-sized institutions which comprised 20 percent of the sample. Church-supported, intermediate-sized schools were second with 15 percent.

Of the total of 4,197 Upward Bound students enrolled in college, 2,761, or 66 percent, were in public institutions, while 2,127, or 51 percent, were in intermediate-sized schools, and 1,304, or 31 percent, were enrolled in publicly-supported, intermediate-sized colleges.

Although the 29 public institutions represent 43 percent of the number in the South, they enroll the majority of Upward Bound college enrollees (55 percent) in the South. It was also found that the black host institutions in the South tend to enroll the greatest numbers of black Upward Bound graduates.

These findings reinforce earlier research indicating: "There is a significant concentration of former Upward Bound black enrollees in southern black schools"... and lends credence to the observation of a low rate of mobility among black college enrollees who tend to enroll in their host institution. Also cited as significant is the support given Upward Bound by southern black church-supported schools.

3. Recommendations

No recommendations were either stated or implied in this survey.

APPENDIX B

UPWARD BOUND GUIDELINES [1]

1969-1970

I. STATEMENT OF PURPOSE

A. General. UPWARD BOUND is a pre-college preparatory program designed to generate the skills and motivation necessary for success in education beyond high school among young people from low-income backgrounds and inadequate secondary school preparation. It acts to remedy poor academic preparation and motivation in secondary school and thus increase a youngster's promise for acceptance and success in a college environment.

Projects must include arrangements to assure cooperation among one or more institutions of higher education and one or more secondary school. They must include a curriculum designed to develop creative thinking, effective expression, and attitudes toward learning needed for post-secondary educational success; necessary health services; and such recreational and cultural and group activities as the Project Director determines may be appropriate.

B. Programs. Begun on a national basis in June 1966, UPWARD BOUND programs were supported by OEO for a first year at 215 colleges, universities, and residential secondary schools. These 215 academic institutions in 47 states, the Virgin Islands, Puerto Rico, and Guam, in turn committed themselves to serve 20,000 youngsters, most of whom had completed the tenth and eleventh grades.

By 1968, approximately 300 institutions were participating in the program, in every state in the country, serving some 26,000 students--many of whom were returning after previous enrollment in UPWARD BOUND.

The typical UPWARD BOUND program was offered by an educational institution combining secondary school and college teachers as faculty, making use of the physical facilities of a college campus for the students, and utilizing the experience and energies of college and university students as tutors.

Almost all UPWARD BOUND students were residents on college, university, and secondary school campuses for six to eight weeks in the summer. During the academic year the UPWARD BOUND institutions continued to meet the students through classes on Saturdays, tutorial sessions during the week, and periodic cultural enrichment programs. In administering these programs, academic institutions have used a wide variety of teaching techniques.

Although it is not possible to list all of the attributes of a successful UPWARD BOUND program, there are certain characteristics that appear common to the effective motivation and education of UPWARD BOUND students. These include:

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[1] OEO Handbook, Office of Economic Opportunity, Washington, D.C., September 1968, 6118-1, pp. 1-21.

1. development of significant working relationships among secondary schools, colleges and universities, and the community at large;
2. involvement of teachers who are committed to the goals of UPWARD BOUND;
3. provision for close and substantial individual student-teacher contact both in the summer and the academic year;
4. effective use of college and university students as tutor-counselors both in the summer and in the academic year;
5. involvement of many resource and non-professional persons from the local communities;
6. willingness on the part of all of the staff to engage the students as partners in learning;
7. an important emphasis on educational goals other than the strictly academic, including activities designed to develop abilities to organize, to persuade, and to cooperate;
8. recognition by the sponsoring institution of this unusual chance to increase its skills in teaching students--of whatever kind;
9. enrollment of a student body which is diverse with regard to background and race, including the taking of affirmative steps to ensure recruitment of students from racial or ethnic backgrounds that have not been well represented at the sponsoring institution;
10. the presence of a project director, or his assistant, working with the program on a full-time basis throughout the year;
11. recognition that the academic year is at least as important as the summer;
12. enrollment of a sizeable cluster of students from a few secondary schools rather than an enrollment of a handful of students from a large number of schools.

II. THE APPLICANT AGENCIES

The following types of applicants are eligible to apply for an UPWARD BOUND grant:

Any recognized Community Action Agency (CAA), with one or more accredited* academic institutions as delegate agencies.

Any accredited* four-year college or university, public or private.

A consortium of two or more accredited* colleges and/or universities, provided clear administrative responsibility rests with a single institution.

Any state-accredited or regionally accredited* secondary school, public or private, with the capability of providing residential facilities for the summer phase of a full-year UPWARD BOUND project.

Any accredited* two-year college, public or private, which has the capability of providing residential facilities for the summer phase of a full-year UPWARD BOUND project.

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*Accreditation by one of the following associations is necessary:

New England Association of Colleges and Secondary Schools

Middle State Association of Colleges and Secondary Schools, Commission of Institutions of Higher Education

North Central Association of Colleges and Secondary Schools, Commission on Colleges and Universities

Northwest Association of Secondary and Higher Schools, Commission on Higher Schools

Southern Association of Colleges and Schools

Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities and Accrediting Commission for Junior Colleges

An eligible accredited institution must offer a liberal arts and general curriculum. Provisionally accredited academic institutions are not eligible to submit proposals. Exceptions may be made if the applicant is an institution of higher education and if the applicant is not located within 100 miles of a regionally accredited institution offering a liberal arts and general curriculum.

THE UPWARD BOUND STUDENT

A. Target Group. The UPWARD BOUND student is a young person with academic potential who because of his poverty background has not had the motivation or preparation to use or demonstrate this potential. Typically this student may be apathetic or even hostile because he comes from a disadvantaged environment unable to help him release his real talent, or he has shunned meaningful educational pursuits because of inadequate school experiences. Quite often the potential that such a student possesses may not show in traditional measurements, such as standardized test scores or grades, but may be revealed more readily through intuitive judgments. The UPWARD BOUND boy or girl is one for whom a college education may become possible given experiences and instruction necessary to overcome earlier obstacles. Without this kind of experience these students would probably not have considered college, or might even have dropped out of high school.

B. Income Criteria. Students who meet the selection criteria above and are to be financed by OEO must be from families whose annual incomes meet the poverty criteria set forth below.

1. The following income levels must be met by at least 90%, repeat 90%, of the OEO-financed UPWARD BOUND students:

(A)

Family Size	Non-Farm	Farm
1	$1,600	$1,100
2	2,100	1,500
3	2,600	1,800
4	3,300	2,300
5	3,900	2,800
6	4,400	3,100
7	4,900	3,400
8	5,400	3,800
9	5,900	4,100
10	6,400*	4,500**

*Above 10 - add $500 for each additional member.

**Above 10 - add $350 for each additional member.

2. Up to 10% of the OEO-financed UPWARD BOUND students may come from families with the following incomes:

(B)

Family Size	Non-Farm	Farm
1	$2,000	$1,500
2	3,000	1,900
3	3,500	2,300
4	4,000	2,600
5	4,500	3,000
6	5,000	3,400
7	5,500	3,800
8	6,000	4,200
9	6,500	4,600
10	7,000*	5,000**

*Above 10 - add $500 for each additional member.

**Above 10 - add $350 for each additional member

3. The OEO income requirement is satisfied if the prospective student lives in federally supported public housing.

4. Students may be selected for UPWARD BOUND whose family income is higher than those in 1 and 2 above if there is serious mismanagement of family income and little if any of such income accrues to the benefit of the student. In such cases, the applicant or delegate academic institution must obtain written testimony from a reliable third party that serious mismanagement of a family's income does exist and works a significant hardship on the prospective UPWARD BOUND student.

5. Students from families on state or federally funded types of welfare are deemed to have met OEO's income criteria.

Institutions wishing to enroll additional students whose incomes levels do not meet these criteria are encouraged to obtain funds from other public or private sources. Such additional students will serve to diversify the backgrounds of the UPWARD BOUND group and may thereby enhance the educational program.

C. Service Focus. UPWARD BOUND will focus on students completing the tenth and eleventh grades. However, for areas or among particular groups of students showing severe drop-out rates at an earlier age, UPWARD BOUND will consider proposals reflecting the need for intervention at the end of eighth and ninth grade levels. Past experience has shown that UPWARD BOUND programs, which, on the one hand, have limited themselves to one grade level, or which, on the other hand, have sought students from too wide a grade spectrum, have been less successful.

OEO wishes to make it entirely clear that, once a program begins, institutions must be prepared to work with the UPWARD BOUND students through the secondary school years and to design UPWARD BOUND programs for these students through the summer following the twelfth grade, that is through what we call the Bridge Summer - the summer between high school graduation and college enrollment. OEO feels that, in general, institutions which select students who have graduated from high school and enroll them for only one summer do not have sufficient time to work with the UPWARD BOUND students. It therefore discourages submission of proposals containing such a component.

It is expected that at least 80% of the students to be financed by OEO will be from areas served by an approved Community Action Agency (CAA).

D. Recruitment. An applicant institution will be expected to use a wide variety of recruitment sources. Individual classroom teachers, guidance officers, school principals, and high school students are natural sources of referrals. However, recruitment should not be limited to referrals from secondary schools only. In many instances the youngster who can benefit from UPWARD BOUND may be found only after careful and thorough direct and personal canvassing of the pockets of poverty in both urban and rural settings. OEO will require the applicant to show evidence that it sought students through a varied recruitment program, including, but not limited to, referrals from present UPWARD BOUND students, cooperation with CAA's, neighborhood visits, Youth Opportunity Centers, VISTA Volunteers, Neighborhood Youth Corps, juvenile court officers, settlement houses, churches, and other community organizations. To make further education possible for Job Corps members who can benefit from UPWARD BOUND, OEO has arranged that they may participate in the program and continue their education. OEO urges applicants to contact nearby Job Corps centers as sources for UPWARD BOUND students.

E. Selection. Students selected for UPWARD BOUND shall be those who have potential for success in a two or four year college, but whose present level of achievement and/or motivation would seem to preclude their acceptance in such an institution.

Recommendations from persons who know the applicant (such as classroom teachers) and intuitive judgments by these and other persons are as important for selection as patterns of grades and test scores. Applicant institutions should make it possible for individual students to make application to an UPWARD BOUND program, as the mere formality of institutional recommendations may dissuade applicants from seriously considering an UPWARD BOUND program. While a moderate amount of testing after admission to an UPWARD BOUND project is permissible, testing for admission is discouraged.

It is very important that candidates be personally interviewed by some members of the UPWARD BOUND staff prior to admission into the program.

In the final analysis, the UPWARD BOUND director and his staff are responsible for effective recruitment strategies and for a wise selection of UPWARD BOUND students; recruitment and selection cannot be delegated. Moreover, the very nature of the program and its eventual success depends upon a wise and effective selection of youngsters. In no case should a youngster be invited into UPWARD BOUND unless the project staff firmly believes that the youngster has some genuine likelihood of eventual success in college.

F. General Area of Services. It is important that colleges with UPWARD BOUND programs work closely with the secondary schools from which the students come. An UPWARD BOUND project should therefore serve an area close enough to provide convenient working relationships with local schools. A project should generally serve areas which are not more than 50 miles from the campus at which students will reside for the summer, although exceptions to this principle will be permitted when circumstances so dictate. While many projects may serve more than one community, an attempt to serve too many and/or too distant communities often reduces opportunities for a significant group of students to come from any single high school and, in addition, makes academic year efforts much less effective. Having a sizeable cluster of students returning to a single school is very important. Both in the summer and in the academic year a cluster of students should gain a common core of experience to share with one another and with their school classmates. Wherever possible, secondary school staff from the schools from which the UPWARD BOUND students are coming should be used in a teaching, tutorial, or counseling capacity during the entire period of the program--summer as well as academic year.

G. Relationships to Community Action Agencies. One of the most promising devices for identification of UPWARD BOUND students is the large number of local community action agencies which are a part of the OEO-administered Community Action Program. The academic institutions must work closely with these groups. The benefits of such cooperation include opportunities for academic institutions and CAA's to establish a significant dialogue. Both have much to gain from such a relationship.

These Guidelines provide some direction toward achieving this relationship, including a requirement that each educational institution operating an UPWARD BOUND project establish a Public Advisory Committee consisting of people from the institution, from the local CAA, secondary schools, civic leaders, and most important, residents of the target neighborhoods from which UPWARD BOUND students come. These residents shall be persons who, themselves, meet the OEO poverty criteria. This group may include, but should not be limited to, family members of UPWARD BOUND students. Such a group can be of central help, particularly in assisting in the recruitment of youngsters who fit UPWARD BOUND selection criteria and in building effective follow-up assistance after these youngsters have experienced an UPWARD BOUND summer.

In order to establish an effective involvement with relevant CAA's, OEO requires that, prior to submission of an application, an appraisal of the proposed program be obtained from the CAA serving the community in which the sponsoring academic institution is located and from all approved CAA's in communities from which students are to be selected. If the applicant is a CAA, such an appraisal must be obtained from any other CAA's in communities from which students are selected.

As in previous years, UPWARD BOUND grants will not be charged against the CAA's 1969 fiscal allotments. The extent of this involvement with CAA's should be clear. Whether or not the applicant is a CAA, the academic institutions retain exclusive jurisdiction over decisions pertaining to program curriculum and UPWARD BOUND staff. While CAA's should be involved in coordinating the project with other antipoverty projects in the community and helping to identify potential UPWARD BOUND students, admission to and discharge from an UPWARD BOUND project shall be determined by the educational institution.

H. Health. Academic institutions are required to provide necessary health services for UPWARD BOUND students, many of whom have not previously had sufficient care, resulting in a negative effect on their attitudes toward and capacity for learning.

OEO expects that grantees will arrange for or provide diagnostic services which will produce information on the medical and dental needs of UPWARD BOUND students.

Enrollees who have medical or dental deficiencies which significantly affect their performance as UPWARD BOUND students should be promptly treated.

Project Directors should arrange to have on file a medical consent form duly signed by students' parent(s) or guardian. This form should be locally developed. It is suggested that the language of this consent form be comprehensive, including preventive, corrective, routine, and emergency medical and dental services for the entire period the student is enrolled in UPWARD BOUND.

If the institution normally provides health services for its student body on payment of a fee such fee may be included in the budget. Institutions, however, can expect health costs to be noticeably higher for UPWARD BOUND students than those normally encountered among college students. OEO should be considered the last dollar source of funds for health services other than those normally provided to students. Applicants are responsible for making and carrying out agreements to obtain all services or reimbursements that are available in the community or under local, state, and federal law. Arrangements should be made, for example, whenever possible, for aid under OEO-funded programs such as comprehensive neighborhood health centers, CAA health clinics, or Title XIX of the Social Security Act (Medicaid) (See Appendix F); for donations of professional services (See Appendix C); and for use of university medical school facilities.

I. Composition of Student Group Selected. In a multi-racial world and nation, no factor is more important to the achievement of the goals of UPWARD BOUND than quality integrated education. Every applicant must indicate in its proposal the intended racial composition of the group it proposes to select.

OEO will give consideration to programs for men only and women only, if the normal student body of the institution is wholly men or wholly women. However, a particular effort should be made to obtain an equal number of girls and boys in the programs, especially from among groups which show a pattern of more female enrollment and retention in educational institutions. Colleges which have historically had a larger female than male enrollment will be expected to enroll males and females in essentially equal proportions in their UPWARD BOUND class.

J. Parental Involvement. Applicant institutions should make every effort to involve the parents in the important educational experiences their youth undertake. Such involvement may include on-campus visits in the summer to observe UPWARD BOUND activities, representative membership on the UPWARD BOUND Advisory Committee, and visits by project personnel to the homes of the students to discuss the educational development or post-secondary school plans of the UPWARD BOUND student. Applicants may make budget requests to meet costs appropriate to these purposes.

IV. THE ACADEMIC INSTITUTION

A. Institutional Commitment. In administering an UPWARD BOUND grant, an academic institution should bear in mind the basic interest of OEO in this program. That interest is to provide an effective educational route out of poverty. UPWARD BOUND programs are not thought of as "summer schools" merely complementing regular academic school programs, but rather as programs in which basic academic attitudes are developed in a setting of close teacher-student contact, with a faculty of college and secondary school teachers, and also persons whose main vocation may not be teaching but whose special skills are important to the student and who have a willingness to explore the use of other than standard materials and teaching methods.

A genuine commitment to UPWARD BOUND on the part of an academic institution's administration and faculty is essential. To demonstrate this commitment, in proposing an UPWARD BOUND program an applicant should provide for the following:

1. Academic Policy Group. Such an institutional UPWARD BOUND academic policy group should be broadly representative of the academic institution's own competencies. This committee should include representatives of several schools and/or departments, including members of the liberal arts faculty and important representation from the administration. Representation from the regular student body on such a group would be desirable. In development of curriculum, of program, and of administrative support, such a committee can be of great value to a Project Director and his staff as well as to the UPWARD BOUND students. The policy group shall be involved with the planning as well as the implementation of UPWARD BOUND projects. OEO expects that proposals will represent the varied competencies of an academic institution rather than single departments or schools within universities.

2. Campus Facilities. The physical facilities of an institution for UPWARD BOUND such as classrooms, dormitories, informal

lounges, recreation rooms, and offices for staff members should be provided in the same quality and availability as they are for the regular faculty and student body. Sharing of the facilities and subsequent communication between the regular staff and student body and the UPWARD BOUND staff and student body have a positive educational effect and should be encouraged. In this regard, OEO discourages special identification on campus of UPWARD BOUND students.

3. Staff. UPWARD BOUND staff should be persons with demonstrated sensitivity to and respect for the kinds of students to be enrolled in UPWARD BOUND. An institution should demonstrate its own commitment to UPWARD BOUND by inclusion of members of its regular teaching faculty in the UPWARD BOUND teaching staff. In its proposal an applicant must show the intended racial composition of the staff, including teachers, tutor-counselors, and non-professionals.

   While staff continuity is important, OEO hopes that UPWARD BOUND will have the widest possible impact upon college and secondary school teaching. OEO therefore suggests that each year an academic institution consider selecting some new staff members in the UPWARD BOUND program.

4. Guidance on Post-Secondary Education. The academic institution should indicate the extent of its commitment to the UPWARD BOUND students by showing the kinds of advice on post-secondary education it will provide, especially in locating finances for higher education for these students. Such advice and assistance in obtaining financial aid become major responsibilities of academic institutions as the students approach completion of secondary school.

5. Secondary School-College Relations. An institution of higher education should indicate the nature and extent of its cooperation with secondary schools by the inclusion of secondary school personnel in the UPWARD BOUND Advisory Committee, and by development of continuing cooperation and active involvement with secondary school personnel, particularly in the academic year phase of the UPWARD BOUND program.

6. Public Advisory Committee. An effective relationship with the target group and the community served by an UPWARD BOUND program should be developed through an UPWARD BOUND Public

Advisory Committee. The sponsoring academic institution should take the initiative in creating such a Committee. It is through the active involvement of this Committee that OEO's statutory mandate of "maximum feasible participation of residents of the areas and members of the groups served" is met. At least 50% of the members of the Committee must be representatives of the target area who themselves meet the poverty criteria.

The UPWARD BOUND Public Advisory Committee may include, but not be limited to, parents of UPWARD BOUND students, staff members of secondary schools which the UPWARD BOUND students attend, members of the staff and principal representative board of the participating CAA's, civic and educational leaders in the community, and the representatives of the sponsoring institution's own staff. If the applicant is not a CAA, the Public Advisory Committee must include representatives of the participating CAA's. The inclusion of college undergraduates as Advisory Committee members is a most effective way of demonstrating an institution's full involvement in the UPWARD BOUND program. Such a committee is expected to meet a minimum of six times per year.

The Public Advisory Committee should perform meaningful functions in the management of the program. It is expected that, at a minimum, it will:

a. Assist in the development of and give approval to the application before it is submitted. The Public Advisory Committee is encouraged to make written comments on any aspects of the program design or operation as a part of the grant application submitted to OEO.

b. Participate in establishing criteria for the selection of professional staff. To the extent it is possible within existing practices of the sponsoring academic institution, it should participate in the selection of the professional and non-professional staff. This participation may include suggesting, talking with, and commenting on all candidates under consideration and making recommendations to the sponsoring academic institution.

c. Initiate suggestions and ideas for program improvements.

d. Serve as a channel for hearing complaints on the program.

e. Assist in organizing activities for parents.

f. Assume some degree of responsibility for communicating with parents and encouraging their participation in the program.

g. Serve as a link to public and private organizations.

h. Aid in recruiting volunteers and assist in mobilizing community resources.

7. Assistance for UPWARD BOUND "Graduates." Applicants are encouraged to utilize private and institutional resources in providing counseling and tutoring for UPWARD BOUND students in college, especially during their critical freshman year. A limited number of proposals to fund such services for former UPWARD BOUND students will be considered. Applicants seeking this type of support must show that other private and institutional services have been sought and were unavailable.

8. Admission of UPWARD BOUND students at the Host College. Past experience has shown that a student is more likely to be successful if he attends the college which hosted the UPWARD BOUND program in which he was enrolled. It is therefore expected that a college sponsoring an UPWARD BOUND program will admit some of its UPWARD BOUND students.

B. Residential Programs. The programs funded in the past indicated the particular benefits of on-campus residence; OEO will give preference to UPWARD BOUND proposals that involve residential summer programs. Non-residential programs will, however, be considered.

C. Academic Institutions and Religious Activities. All UPWARD BOUND projects must be conducted on a completely non-sectarian basis. Projects will be subject to certain special conditions to meet prohibitions against any selection on the basis of religion, teaching of religion, religious proselytization, or required religious worship.

V. THE UPWARD BOUND PROGRAM

A. Curriculum. The academic part of the UPWARD BOUND program is crucial. More often than not, a poor academic program equals a poor UPWARD BOUND program as far as the students are concerned. The content of the curriculum is designed by the educational institution. Because UPWARD BOUND is a full-year program, the academic year is as important as the more concentrated summer phase. OEO, in reviewing proposals, will give equal attention to the winter program and the on-campus summer program. The curriculum for both phases should be developed to provide the intellectual qualities and the attitudes necessary for success in college. It should aim, therefore, to develop critical thinking, effective expression, and positive attitudes toward learning.

Students whose motivation toward learning is already low or nonexistent are unlikely to change their attitudes if the curriculum and academic climate is similar to what they have rejected. If they have not been "reached" by lectures, by lack of opportunities to express freely their own ideas, by an overemphasis on facts, by dull text books or work books, or tedious drill, by a repetition of the same material; it is imperative for an UPWARD BOUND program to offer them first-rate material which is at the same time exciting and relevant to them. To do this requires teachers who honestly believe that the subject they teach is important for the student to know and who themselves genuinely enjoy and know their subject matter. Past experience has shown that it is particularly important that to be motivational the classes should be academically challenging. UPWARD BOUND students returning for a second year may need a curriculum different, at least in part, from that offered new students. This may even include access to regular college courses given for credits.

B. Other Educational Goals. Applicants shall propose, in addition to academic components, activities which will enhance the personal effectiveness of the students and provide opportunities for the application of learning experiences to life experiences. Such activities might include self-government, a student newspaper, student services to others (tutoring younger school pupils or other neighborhood activities).

Cultural programs, including field trips to important historic, artistic, or cultural places in nearby areas, shall be a part of every project.

Recreational and physical activities should be part of every UPWARD BOUND project. Team activities (soccer, softball, etc.) should be augmented by individual recreational or physical activities (swimming, tennis, chess, etc.) to provide introduction to life-long recreational pursuits.

C. Summer Program and Jobs. OEO expects the UPWARD BOUND summer program to require the student's full time participation. It may be necessary, however, for some students to work part time in the summer. This is particularly the case when the students are Bridge students since they often feel that their most important need is meeting the college expenses which lie immediately ahead. If this occurs, Project Directors should make every effort to see that such work does not interfere with the purposes of UPWARD BOUND, especially the student's participation in the academic program.

D. Staff

1. Project Director. The Project Director should be a regular member of the proposing academic institution's faculty and should be integrally involved in both the planning and the implementation of the project. Whenever possible, the Project Director should be a person who has had experience with or demonstrated sensitivity to and respect for the type of students to be enrolled in the UPWARD BOUND project. In order to provide a substantial academic year program, OEO prefers that in addition to full-time status during the summer component for the Project Director and/or Assistant Director, administration of the project be vested in a substantially full-time professional person during the academic year phase.

   A full-time person is particularly important for programs which have high school seniors during the academic year. Someone is needed to assist these students in filling out applications for admissions and/or scholarships, writing recommendations, and making appropriate personal contacts whenever necessary.

Among the several responsibilities of the Project Director, none should take priority over his responsibility of seeing that UPWARD BOUND graduates are placed in appropriate colleges and universities. This may well be the Project Directors's last official responsibility to an UPWARD BOUND student, but it is quite possibly his most important responsibility.

2. Teaching Staff. The teaching staff must include both college and secondary school faculty. All teachers should be selected on the basis of experience with and/or demonstrated sensitivity to and respect for the kinds of students to be enrolled in UPWARD BOUND projects. At least one-third of the UPWARD BOUND teaching staff should be members of the regular teaching faculty of the proposing institution. At least one-third should be regular teachers in the secondary schools. Wherever possible, these secondary schools should be the same as those which the UPWARD BOUND students attend during the academic year. For private secondary school applicants, at least one-third of their teaching staff must be drawn from their institution, and at least one-third from other sending schools. Staff may include an Assistant Project Director, specialists in such fields as art, drama, film, reading, speech, or recreation, on a full or part-time basis. While teachers from secondary schools and the colleges may be the most appropriate, applicants should bear in mind the special contributions in certain areas which can be made by Peace Corps returnees, VISTA Volunteers, undergraduate and graduate students, youth workers, and the like. Appropriate staff should be available to each program to work with students who have heretofore reacted negatively to conventional social and/or educational environment. Neighborhood or youth workers who have experience in working with such youngsters may serve as dormitory counselors or as dormitory heads. In addition, staff should be available to work with students who appear to suffer from psychological difficulties.

3. Tutor-Counselors. Each UPWARD BOUND program should include tutor-counselors who are students from within or without the sponsoring institution. Previous programs indicated the importance of tutors with special ability to establish rapport with UPWARD BOUND students. Frequently, such rapport was markedly enhanced by the use of tutors from racial or ethnic groups represented by the UPWARD BOUND students. UPWARD BOUND "graduates" now in college may bring special benefits to the program.

Tutors should live in the dormitories with the students. While OEO would discourage the practice, tutors may be permitted to take no more than one course on campus in the institution's own summer session.

Institutions of higher education are encouraged to employ students as tutor-counselors who are eligible for Work-Study funds under the Higher Education Act as amended. UPWARD BOUND funds may be used as the grantee's local Work-Study share for students working in UPWARD BOUND. Under the most recent amendments to the Higher Education Act, the local share should usually be at least 20%.

Applicants are encouraged to discuss any use of Work-Study funds with the responsible officials at these institutions. It should be remembered that OEO does not administer the Work-Study Program; program and budget planning here should be done in cooperation with those persons directly involved in adminstering Work-Study funds.

4. Other Supporting Staff. Other supporting staff should include professionals or non-professionals from the community from which the students are selected. When possible, priority for non-professional positions shall be given to residents of the area from which the students come and who themselves meet OEO poverty criteria. The applicant should consider including in the program such non-professional positions as teacher aides, dormitory aides, clerical aides, and family liaison aides, or any other similar "new career" position which will further the objectives of the program. The applicant should provide means by which persons filling these positions will be given adequate training to provide for career development. CAA's as well as the Public Advisory Committee should be a prominent source for the nomination of such persons.

The ratio of students to staff should be appropriate to the special needs of the particular project and its students. Such ratios should evolve from a clear understanding of the nature of an UPWARD BOUND class where maximum student participation is of importance and where class-student-teacher interchange may be in marked contrast to the normal school experience. In the highly personal atmosphere of the UPWARD BOUND program lies the key to the educational experience which the project is designed to generate.

This same student-teacher or student-tutor interchange is equally important in the academic year portion of the project. OEO will be critical of student-staff ratios, if notably high or low, whether in the summer or the academic year.

Provision should be made for appropriate staff orientation prior to the students' arrival on campus. Budget requests for financing such orientation up to a maximum of five days immediately prior to the beginning of the program may be included in proposals. Proposals may also include providing for specialized consultants, where necessary.

E. Non-Discrimination

1. Importance of Non-Discrimination. OEO will insist on full compliance with all applicable non-discrimination policies and conditions. It is prepared to take all appropriate and necessary action to assure compliance, including termination of grants and suits to recover funds previously released.

2. Special Case when Several Institutions are Involved. Two or more institutions which propose to operate UPWARD BOUND programs serving the same general geographic area, and which have different racial, color, ethnic, or religious admission practices in their regular operations, will not be funded to serve such an area if OEO believes that the result will be segregation of their respective programs along those lines.

3. Special Non-Discrimination Requirements. Execution of the standard OEO Civil Rights Assurance Form and the Grants Application shall constitute agreement to comply with all conditions relating to non-discrimination contained in the Conditions Governing Community Action Program Grants, as well as the following supplementary requirements applicable to UPWARD BOUND projects. The requirements set forth below shall apply to every grantee and other academic institution or agency involved in UPWARD BOUND regardless of the composition of its regular staff and student body. Applicants and delegate agencies whose regular student bodies or staff are disproportionately drawn from particular racial, color, ethnic, or religious groups will be expected to include in their applications a statement of their specific plans for avoiding this pattern and insuring non-segregation in their UPWARD BOUND projects.

   a. Every phase and unit of the project shall be open to all eligible students without regard to race, color, creed, or national origin. Students and staff, both professional and non-professional, must be recruited, selected, and assigned to classes, duties, and living accommodations without regard to race, color, creed, or national origin. There shall be no recruitment, selection, assignment, or reassignment of students or staff on any basis or in any manner which results in segregation or discrimination.

b. The areas or groups to be served by the project shall not be selected in such manner as to produce segregation or discrimination.

c. There shall be no discrimination or segregation within the project, its classes, activities, or living accommodations, once students and staff have been selected and assigned. To the extent that living accommodations are not provided on a campus, the location of such living accommodations shall be selected so as to provide a mixture of eligible students.

d. All publicity and recruitment efforts must be designed to reach all eligible groups with equal effectiveness and must make clear that the program will be operated on a completely non-discriminatory and unsegregated basis.

e. Eligibility for the project shall not be based on eligibility to enter or return to a particular secondary school, college, or university in a succeeding school year, if such eligibility will be based on race, color, creed, or national origin, or if initial or presumptive school assignment to a secondary school will be made on such a basis, subject to the right of the child or his parents to request a transfer or reassignment to another school.

f. The terms "discrimination" and "segregation" include all recruitment, selection, assignment, or different or separate treatment by the grantee, any delegate agency, or contractor based on the race, color, creed, or national origin of students or of professional or non-professional staff members, and also include any arrangement designed to produce merely "token" integration.

F. Religious Activities. The grantee shall ensure, and shall provide in any contract or other arrangement with a church-related school, schools, or school system, that:

1. None of the grant funds shall be used for the teaching of religion, for religious proselytization, or religious worship.

2. There shall be no religious instruction, proselytization, or worship in connection with any program supported in whole or in part by this grant and conducted outside of normal school hours (such as after-school programs, summer-school programs) or conducted for persons who are not participating in the regular curriculum (such as pre-school, adult-education, or a program for dropouts).

3. In any of the programs described in (2) above, admission shall not be based directly or indirectly on religious affiliation or on attendance at a church-related school or other church - related institution. Affirmative steps shall be taken to make known the general availability of such programs in the area served.

4. Participation in programs supported in whole or in part by this grant shall not be used as a means of inducing participation in sectarian or religious activities or of recruitment for sectarian or religious institutions.

5. The textbooks and other materials used in programs supported in whole or in part by this grant shall be devoid of sectarian or religious content.

6. Facilities renovated or rented for programs financed in whole or in part by this grant shall be devoid of sectarian or religious symbols, decoration, or other sectarian identification. Other facilities used primarily for such programs shall, to the maximum feasible extent, be devoid of sectarian or religious symbols, decoration, or other sectarian identification.

7. Grant funds shall not be used in any manner to release funds regularly expended by the school, schools, or school system. For example, grant funds shall not be used to pay in any part costs which would otherwise be incurred by the school, schools, or school systems in their regular operation.

The grantee will, before executing a contract with any church-related school, schools, or school system, submit the proposed contract to OEO for approval.

VI. UPWARD BOUND'S RELATIONSHIP TO OTHER PUBLIC AND PRIVATE RESOURCES

OEO wishes its UPWARD BOUND project to be complementary to other programs available from OEO itself as well as those emanating from other government and private sources. Specific attention is drawn to the following:

A. The Elementary and Secondary Education Act of 1965, as amended, which offers assistance to school programs for the education of children of low-income families;

B. The Economic Opportunity Act of 1964, as amended, which establishes the Neighborhood Youth Corps under which UPWARD BOUND high school students, but not high school graduates, should be eligible for paying jobs while in high school. The Job Corps, established under Title I of the Act, should be a source of recruitment for potential UPWARD BOUND students. In addition, UPWARD BOUND projects should be coordinated with compensatory education, neighborhood centers, community organizations, and special summer programs which are part of local Community Action Programs under Title II of the Act;

C. The Higher Education Act of 1965 as amended, which contains federal scholarships for needy college students which may be conditionally committed to high school students as well as the encouragement of secondary school dropouts to re-enter school. The college Work-Study program, under which needy youngsters accepted in a college can be provided with jobs, is now a part of this Act. It can finance college students who are employed in UPWARD BOUND projects;

D. Numerous other programs designed to respond to the disadvantaged high-school-age student supported by private foundations and other resources.

VII. NATIONAL UPWARD BOUND CHARACTERIZATION

Academic institutions will be asked to cooperate in supplying information to OEO for a national characterization of UPWARD BOUND. This information is essential to OEO for its reports to the Congress and for future development of UPWARD BOUND. Because this characterization will be national and because maximum OEO funds must go to program components of direct benefit to the students, no request for funds for local research, evaluation, or statistical work will be granted. Similarly, requests to use UPWARD BOUND students in teacher training programs will not be granted.

APPENDIX C

COMPUTATION OF LIFETIME INCOMES

The basic formulas used in computing the present value of lifetime incomes for this study are:

From the individual's viewpoint:

$$A_{srea} = I_{sea} \times R_{sre} \times P_{sra} \times (1 + g)^{a-b}$$

$$V_{isre} = \sum_{a=b}^{z} \frac{A_{srea}}{(1 + i)^{a-b}}$$

From the government's viewpoint:

$$A_{srea} = I_{sea} \times R_{sre} \times P_{sra}$$

$$V_{isre} = \sum_{a=b}^{z} \frac{A_{srea}}{(1 + i)^{a-b}}$$

s refers to sex

r refers to race (white or nonwhite)

e refers to amount of education (in our categories: 1-3 years high school, 4 years high school, 1-3 years college, 4 or more years college),

a refers to age

A = adjusted income. Thus A_{srea} refers to the imputed income of an individual of a particular sex, race and amount of education at a particular age.

I = unadjusted income derived from census figures.

R = an income correction factor for race.

P = probability of being alive at a particular age.

g = rate of real growth of the economy (set at 3 percent for this study).

i = interest rate used in discounting for present value purposes.

V_{isre} = present value of the stream of lifetime income for a particular sex, race, and education group, for a discount rate i.

b = beginning age, and age to which present value is computed. Age 16 was selected as the beginning age for the purposes of this study.

z = age at which income is assumed to end. Age 65 was selected for this study.

Each of the factors in the above formulas will be discussed separately, giving details of source of data, method of computation, and caveats to be observed in interpreting the data.

The first factor is I_{sea}, the unadjusted income at a particular age for a given sex and education group. Data were obtained from the U.S. Bureau of the Census (1969) on incomes of individuals in 1967. The data are for income in 1967 of individuals above the age of 25. Data are given by age groups for the different education classifications for all males and all females. Separately, data are given by sex, race, and education classification, but not by age group. Thus it was necessary to extract unadjusted incomes by sex, education, and age (I_{sea}) and then adjust these for race by a factor (R_{sre}) computed from the second group of data.

The data by sex, education, and age are given by age groups for the ages 25-34, 35-44, 45-54, and 55-64. For each group, both mean and median income of those with income is given, as well as the total number of individuals in the category and the number with income. First, it was necessary to decide whether to use the mean or the median to represent the income for the group. Sometimes there is a sizeable spread between the two, with the mean almost always higher than the median. From a strictly mathematical point of view, it is not proper to do mathematical manipulations with the median, whereas it is with the mean. However, there are good practical reasons for choosing the median in this case. The mean is substantially higher than the median because the distribution of incomes is skewed. A few individuals with very high incomes affect the mean disproportionately. This study is concerned with individuals who will not inherit great wealth or business opportunities. Because the mean is influenced by high incomes which are associated with this, whereas the median is not, it seems more appropriate to use the median for our study. The fact that the median is based on a very large sample gives it a stability that it would not otherwise have, and makes the adjustments very unlikely to lead to unreasonable results.

It would have been more desirable to use a measure of earnings, rather than income, but such data are not available recently in usable form. Even this would not be a perfect measure. In any case, since in computing benefits of the program, differentials are used, and since income differentials are likely to be very similar to earnings differentials, no gross errors are introduced by our measure.

The income to be entered for a particular sex, education, and age group was first adjusted for those who had no income by multiplying the median income of those with income by the ratio of those with income to all those in the group. This gives an I for, say, the males of 25-34 years of age with 1-3 years high school education. Some economists, in computing lifetime incomes, have assigned this income to every age in the group from 25 to 34. This would be appropriate if there were no discounting, but the operation of the discount factor, putting more weight on the earlier years, would make such a method give artificially high results. Instead, the I for age 25-34 has been assigned to age 30, that for age 35-44 to age 40, etc. and then values for the other ages were filled in by linear interpolation. From age 60 to 65, and below 30 (with exceptions discussed below) the incomes were extrapolated in the same fashion.

It was necessary to treat incomes during the period when some of the individuals in the study would be in school in a different fashion. The census data make no distinction between incomes of those in school and those not in school. However, Spiegelman (1968) presents some estimate yearly earnings of those enrolled in school by sex, race, and age. A summary of the information from the table on page 106 of his study is given below:

Earnings of Those Enrolled in School

Sex-Race	Age	Earnings per Year
White males	14-17	$ 150
	18-19	430
	20-24	1,000
White females	14-17	70
	18-19	280
	20-24	660
Nonwhite males	14-17	110
	18-19	290
	20-24	760
Nonwhite females	14-17	40
	18-19	130
	20-24	580

The appropriate figures from this table were entered for age 16 for those with 1-3 years high school, for ages 16-18 for those with four years high school (age 18 was assumed as the normal graduation age), for ages 16-20 for those with 1-3 years college, and for ages 16-22 for those with 4 or more years college. For females, incomes from age 30 were then extrapolated down until they met the figures for income while enrolled in school. This was also done for males except in the case of high school dropouts. Extrapolation of income from age 30 down to age 17 gave unreasonably high incomes at the early ages. Instead, the income for year-round full-time workers aged 16-19, adjusting it for an assumed unemployment rate, was inserted at age 18. Incomes from age 30 to 20 were extrapolated, a figure for age 19 was interpolated, and a figure for age 17 was similarly extrapolated.

The result of all this is a set of incomes from age 16 to 65 for all males and for all females in each of four different education groups. It was now necessary to adjust these for race, with the factor R_{sre}. The median income of white males for a given education group was corrected as before for those without income, and divided by the corrected income of all males with this amount of education. The resulting race correction factor was applied to all incomes in the table for white males. A race correction factor was computed in this way for each of the 16 sex, race, and education groups.

The third factor involved in getting adjusted incomes is the mortality rate. It is expressed as P_{sra}, the probability that a person of a particular sex and race who was alive at age 16 would still be alive at a particular age. It is not necessary to estimate whether he would still be capable of working at that age, because the census income figures reflect this. The probabilities were calculated from a mortality table for 1966 appearing in U.S. Department of Health, Education, and Welfare (1968).

The fourth factor has not often been used in lifetime income calculations, but it is a very important one. The procedure followed thus far is an effort to use cross-sectional data to represent longitudinal data. That is, data on present earnings for people age 60 are used to represent imputed incomes of persons currently in their teens when they reach age 60. But this can result in a serious underestimate, for our economy is growing, and real incomes grow with it. Miller (1965) has shown this by comparisons of cohort data with cross-sectional data. In his study for the period 1950-1960 real incomes grew at the rate of approximately 3.5 percent per year in constant dollars purely as a result of the growth of the economy. (He does not give this figure of 3.5 percent, and as a matter of fact somewhat confuses the issue when he takes a rate of growth for the decade and divides it by 10 to get a rate per year. The 3.5 percent figure was calculated as an average from his decade data.) Miller gives data on the results of this decade of economic growth on incomes of males on different races, education, and section of the country. While it appears that the growth affected incomes of younger cohorts more than those of older cohorts, the more educated more than less educated, and the nonwhites more than the whites, the results were sufficiently mixed and similar to allow use of a single estimate for all classes. Data from other sources indicates a growth in productivity that approximates 3 percent per annum. This figure of 3 percent has been chosen as a reasonable estimate of future growth. The factor $(1 + g)^{a-b}$ is merely the compound interest formula used to apply this growth rate to future years. The usual representation of the formula is $(1 + i)^n$. In this case, $i = g = .03$, and n, the number of years, is equal to a, the age under consideration, less b, the starting age of 16.

The product of these four factors is A_{srea}, the adjusted income for each age from 16 to 65 for each sex, race, and education category. The second formula is used to get the present value of the lifetime income stream for each category at the three selected interest rates. It expresses the fact that one takes each adjusted income, divides it by $(1 + i)^{a-b}$, and sums the results. Here i equals 5 percent, 7.5 percent or 10 percent, the three discount rates used.

As in all extrapolations used in predicting the future, it is dangerous to assume that our economy will continue to expand for the next 50 years at 3 percent per year. The fact that productivity has been increasing at approximately this rate since the end of World War II is no assurance that it will continue. But we have nothing better than history to go on, and it has been assumed that this rate of expansion will continue.

Lifetime incomes from the government's viewpoint (as discussed in the body of this report) should be calculated without including the effect of economic growth. Thus, the formulas from the government's viewpoint are identical with those from the individual's viewpoint except for the omission of the factor $(1 + g)^{a-b}$.

APPENDIX D

BIBLIOGRAPHIC REFERENCES IN CHAPTER VII

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GPO 892-190